ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: AIRBORNE MAGNETIC SURVEY REPORT ON SCHAFT CREEK CLAIMS

TOTAL COST: $202,779.00

AUTHOR(S): ELMER B. STEWART

SIGNATURE(S): El B. Stewart

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): MX-1-647, March 31, 2011
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5158104/2011/DEC/22

YEAR OF WORK: 2011

PROPERTY NAME: SCHAFT CREEK PROJECT

CLAIM NAME(S) (on which work was done): GREATER KOPPER, SCHAFT 1

COMMODITIES SOUGHT: COPPER, GOLD, MOLYBDENUM, SILVER

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN: 104G 063

MINING DIVISION: LIARD MINING DIVISION
NTS / BCGS: NAD 83, Zone 9
LATITUDE: 57 ° 9 ' 55 "
LONGITUDE: 130 ° 53 ' 1 " (at centre of work)
UTM Zone: EASTING: 308444 NORTHING: 6363252

OWNER(S): COPPER FOX METALS INC.

MAILING ADDRESS: SUITE 650, 340 – 12 AVE SW, CALGARY, AB T2R 1L5

OPERATOR(S) [who paid for the work]: COPPER FOX METALS INC.

MAILING ADDRESS: SUITE 650, 340 – 12 AVE SW, CALGARY, AB T2R 1L5

REPORT KEYWORDS TRIASSIC, STUHINI GROUP

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

28848

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne	2,520 LINE KM	569460, 517462, 521312	202,779.00
GEOCHEMICAL (number of samples analysed for …)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size, storage location)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			
Trench (number/metres)			
Underground development (metres)			
Other			
		TOTAL COST	202,779.00

AIRBORNE MAGNETIC SURVEY REPORT ON SCHAFT CREEK CLAIMS

Schaft Creek Property
Telegraph Creek Map Area
(NTS 104G/.035, .045 & .046)
Liard Mining Division, Northwestern British Columbia,
Latitude 57˚24'13"N, Longitude 131˚1'59"W (at centre of work)
UTM Zone: NAD 83, Zone 9
Easting: 378000 / Northing: 6368000

For

copper FOX METALS

By Elmer B. Stewart, P.Geol., MSc.
March 20, 2011

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1.0 INTRODUCTION & SUMMARY

This report is prepared by Elmer B. Stewart, P. Geol., and describes the airborne geophysical (total field magnetic) survey completed by Precision GeoSurveys Inc. for Copper Fox Metals Inc. ("Copper Fox") over a large portion of the Schaft Creek project. The details of the airborne report are included in a report entitled "Airborne Geophysical Survey Report, Schaft Creek Property" dated June 2011 authored by Jenny Poon. Copper Fox is the owner and operator of the Schaft Creek project which hosts the undeveloped Schaft Creek copper-gold-molybdenum-silver porphyry deposit and several other large zones of copper-gold-molybdenum-silver mineralization exposed in outcrop. The Schaft Creek project is located in northwestern British Columbia and is currently in the feasibility study stage (Figure 1). The Schaft Creek deposit was discovered in the late 1950s. As of the date of this report, the Schaft Creek project covers the mineral tenures set out in Table-1 below.

The airborne magnetic survey covers a significant portion of the Schaft Creek project (Figure-1A). Based on the data generated by the 2010 exploration program on the Paramount zone of the Schaft Creek deposit and the information obtained by the purchase of two groups of mineral tenures in March 2011, Copper Fox was of the opinion that the Schaft Creek project had potential to host additional zones of copper-gold-molybdenum-silver mineralization along strike to both the north and south of the Schaft Creek deposit. To assess the potential of the project and to obtain a magnetic signature of the setting for the Schaft Creek deposit, the airborne survey was completed. The total field magnetic and calculate vertical gradient maps generated from the total field magnetic data has identified a strong positive magnetic lineament that has been traced for a distance of approximately 15 kilometres. This positive magnetic lineament show a strong association with the Schaft Creek deposit and two other zones where previous sampling has indentified significant copper-gold-molybdenum-silver mineralization on surface.

2.0 PROPERTY GEOGRAPHY/PHYSIOGRAPHIC LOCATION

The Schaft Creek Project is located approximately 130 km southwest of Dease Lake within the Liard Mining Division and the Cassiar Iskut Stikine Land and Resource Management Plan. The Schaft Creek Project is located approximately 1,050 km northwest of Vancouver, British Columbia. The Schaft Creek Project is also located approximately 60 km south of the village of Telegraph Creek, 130 km southwest of Dease Lake and 80 km southwest of the village of Iskut and approximately 375 km northwest of the town of Smithers, BC. The center of the Schaft Creek Project is located at approximately 57° 24' 13" N latitude and 131° 1' 59" W longitude, or approximate UTM coordinates of 3780000 E and 6368000 N (NAD83, Zone 9). The map reference sheet is Energy Mines and Resources Canada topographic sheet 104G, Telegraph Creek.

3.0 CLAIMS

Copper Fox, as of December 22, 2011, holds 100% ownership of the mineral tenures set out in Table-1 that make up the Schaft Creek project. Tenure data for each of the claims included in the Schaft Creek project is listed in Table 1.

The Schaft Creek deposit consists of the Paramount and Liard zones and is located in the southern part of tenure number 514603 and the northern part of tenure number 514637. This area was the main area of focus for the 2010-2011 mineral exploration programs completed by Copper Fox. The new expiry dates and total area of the mineral tenures are listed in Table-1. Teck Resources Limited ("Teck") has an underlying ("earn-back" option) interest in the Schaft Creek project. Liard Copper Mines Limited holds a 30% Net Proceeds Interest and Royal Gold Inc. holds a 3.5% Net Profits Interest in the Schaft Creek deposit.

FIGURE 1: SCHAFT CREEK PROPERTY LOCATION PLAN

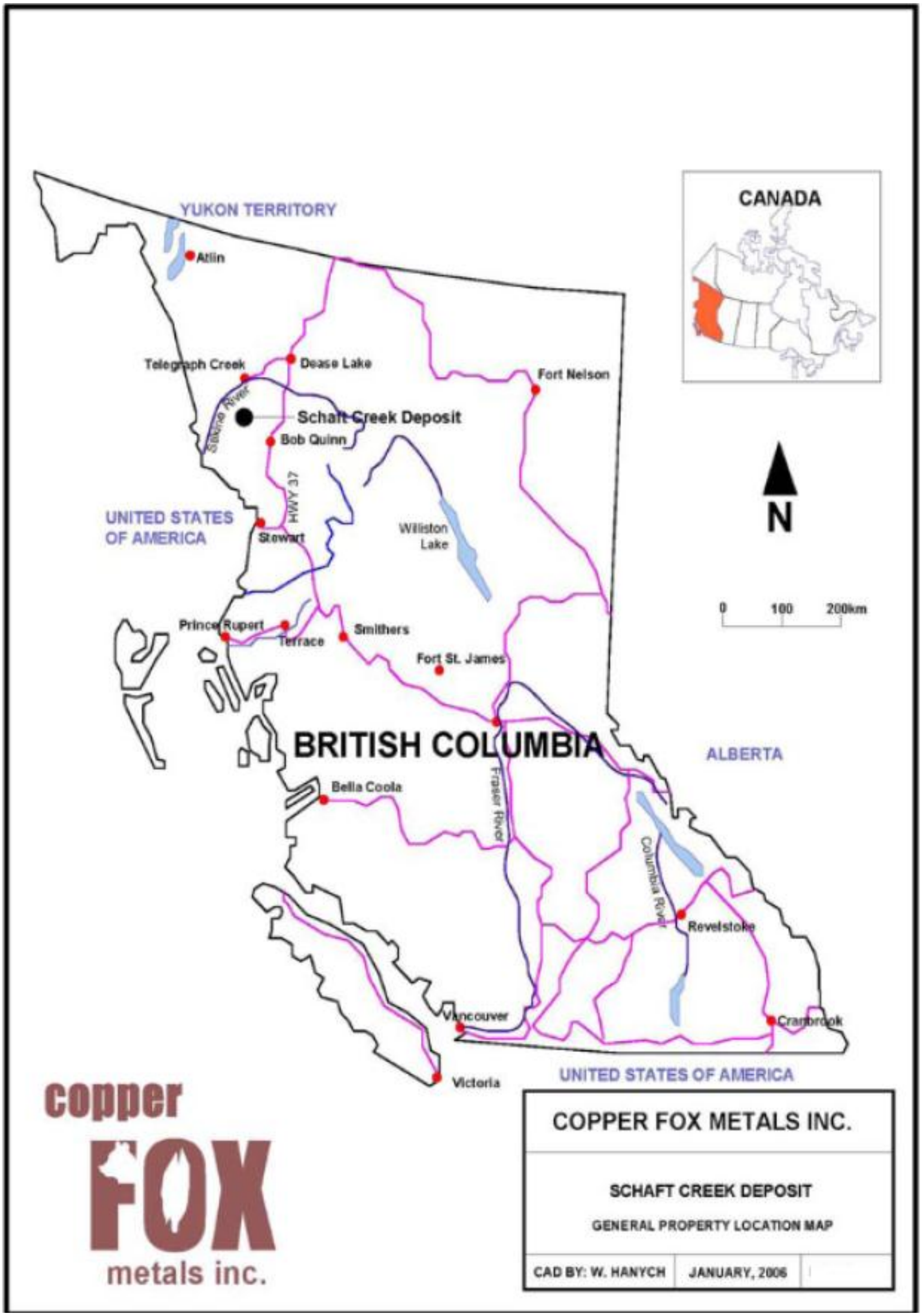
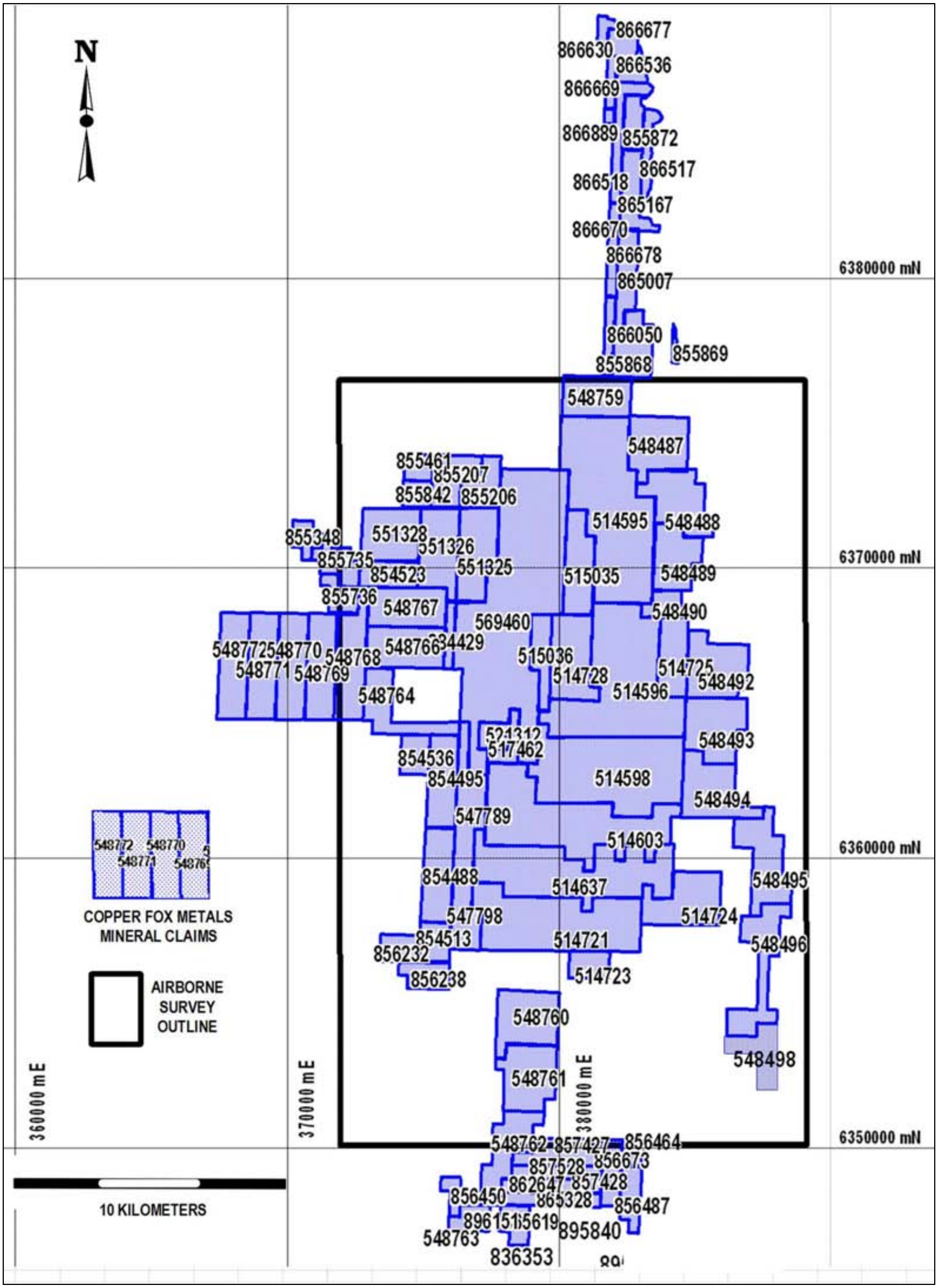


TABLE 1: MINERAL CLAIMS WITHIN THE SCHAFT CREEK PROJECT (DEC. 22/11)

Tenure #	Claim Name	Owner	Issue Date	Good To Date	Status	Area (ha)
514595		207046 (100%)	2005/Jun/16	2018/Oct/30	GOOD	1653.042
514596		207046 (100%)	2005/Jun/16	2018/Oct/30	GOOD	1550.962
514598		207046 (100%)	2005/Jun/16	2018/Oct/30	GOOD	1412.623
514603		207046 (100%)	2005/Jun/16	2018/Oct/30	GOOD	1291.057
514637		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	1256.712
514721		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	1169.948
514723		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	139.745
514724		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	471.387
514725		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	313.607
514728		207046 (100%)	2005/Jun/17	2018/Oct/30	GOOD	435.569
515035		207046 (100%)	2005/Jun/22	2018/Oct/30	GOOD	383.005
515036		207046 (100%)	2005/Jun/22	2018/Oct/30	GOOD	191.645
547789		207046 (100%)	2006/Dec/21	2018/Dec/21	GOOD	418.6954
547798		207046 (100%)	2006/Dec/21	2018/Dec/21	GOOD	226.9987
548487	BLOCK B1	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	434.7819
548488	BLOCK B2	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	434.989
548489	BLOCK B3	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	365.5676
548490	BLOCK B4	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	121.9042
548492	BLOCK C1	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	435.603
548493	BLOCK C2	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	435.8293
548494	BLOCK C3	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	436.0643
548495	BLOCK C4	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	436.3091
548496	BLOCK C5	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	436.6951
548498	BLOCK C6	207046 (100%)	2007/Jan/02	2018/Jan/15	GOOD	227.243
548759	AREA A	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	365.0646
548760	AREA C1	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	436.9025
548761	AREA C2	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	437.1152
548762	AREA C3	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	367.4112
548763	AREA C4	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	122.5423
548764	AREA B1	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	366.0431
548766	AREA B2	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	418.111
548767	AREA B3	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	435.382
548768	AREA B4	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	435.6001
548769	AREA B5	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	418.185
548770	AREA B6	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	418.1864
548771	AREA B7	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	418.189
548772	AREA B8	207046 (100%)	2007/Jan/05	2018/Jan/15	GOOD	418.1894
551325	AREA D1	207046 (100%)	2007/Feb/06	2018/Feb/06	GOOD	435.1767
551326	AREA D2	207046 (100%)	2007/Feb/06	2018/Feb/06	GOOD	435.1697
551328	AREA D3	207046 (100%)	2007/Feb/06	2018/Feb/06	GOOD	417.7083
Total						**21024.96**
517462		207046 (100%)	2005/Jul/12	2012/Dec/30	GOOD	17.436
521312	SCHAFT 1	207046 (100%)	2005/Oct/18	2012/Dec/30	GOOD	191.784
569460	GREATER KOPPER	207046 (100%)	2007/Nov/05	2012/Dec/30	GOOD	2769.098
Total						**2978.318**

Tenure #	**Claim Name**	**Owner**	**Issue Date**	**Good To Date**	**Status**	**Area (ha)**
854488	SILVER FOX 86	207046 (100%)	2011/May/13	2012/May/13	GOOD	366.5575
854495	SILVER FOX 87	207046 (100%)	2011/May/13	2012/May/13	GOOD	366.2694
854513	SILVER FOX 89	207046 (100%)	2011/May/14	2012/May/14	GOOD	157.1843
854523	WHITE RABBIT 90	207046 (100%)	2011/May/14	2012/May/14	GOOD	208.9252
854536	SILVER FOX 91	207046 (100%)	2011/May/14	2012/May/14	GOOD	156.9374
855206	PTARMIGAN 93	207046 (100%)	2011/May/18	2012/May/18	GOOD	208.7684
855207	PTARMIGAN 95	207046 (100%)	2011/May/18	2012/May/18	GOOD	278.339
855348	WHITE RABBIT 92	207046 (100%)	2011/May/21	2012/May/21	GOOD	104.4313
855461	PTARMIGAN 97	207046 (100%)	2011/May/24	2012/May/24	GOOD	104.3678
855735	WHITE RABBIT 101	207046 (100%)	2011/May/26	2012/May/26	GOOD	191.496
855736	WHITE RABBIT 102	207046 (100%)	2011/May/26	2012/May/26	GOOD	139.3092
855842	PTARMIGAN 103	207046 (100%)	2011/May/27	2012/May/27	GOOD	104.3915
855868	TERN 120	207046 (100%)	2011/May/30	2012/May/30	GOOD	295.4047
855869	TERN 121	207046 (100%)	2011/May/30	2012/May/30	GOOD	34.7542
855872	TERN 103	207046 (100%)	2011/May/30	2012/May/30	GOOD	138.7507
856232	SILVER FOX 118	207046 (100%)	2011/Jun/03	2012/Jun/03	GOOD	139.7259
856238	SILVER FOX 119	207046 (100%)	2011/Jun/03	2012/Jun/03	GOOD	157.23
856450	ELK 151	207046 (100%)	2011/Jun/08	2012/Jun/08	GOOD	105.0158
856464	ELK 152	207046 (100%)	2011/Jun/08	2012/Jun/08	GOOD	69.983
856487	ELK152	207046 (100%)	2011/Jun/09	2012/Jun/09	GOOD	157.52
856673	ELK 153	207046 (100%)	2011/Jun/10	2012/Jun/10	GOOD	174.9874
857427	ELK 154	207046 (100%)	2011/Jun/21	2012/Jun/21	GOOD	279.9349
857428	ELK 155	207046 (100%)	2011/Jun/21	2012/Jun/21	GOOD	69.9989
857528	ELK 156	207046 (100%)	2011/Jun/22	2012/Jun/22	GOOD	122.4914
862647	ELK 158	207046 (100%)	2011/Jul/04	2012/Jul/04	GOOD	140.0061
865007	TERN 125	207046 (100%)	2011/Jul/07	2011/Jul/07	GOOD	243.131
865167	TERN 127	207046 (100%)	2011/Jul/08	2012/Jul/08	GOOD	242.9604
865328	ELK 166	207046 (100%)	2011/Jul/09	2012/Jul/09	GOOD	175.0273
865619	ELK 167	207046 (100%)	2011/Jul/11	2012/Jul/11	GOOD	140.0507
866050	TERN 128	207046 (100%)	2011/Jul/13	2011/Jul/13	GOOD	104.2511
866517	TERN 130	207046 (100%)	2011/Jul/18	2012/Jul/18	GOOD	138.7842
866518	TERN 131	207046 (100%)	2011/Jul/18	2012/Jul/18	GOOD	208.137
866536	TERN 132	207046 (100%)	2011/Jul/18	2012/Jul/18	GOOD	208.0058
866630	TERN 131	207046 (100%)	2011/Jul/19	2012/Jul/19	GOOD	51.9883
866669	TERN 133	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	69.3512
866670	TERN 134	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	34.715
866671	TERN 135	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	17.3328
866677	TERN 135	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	17.3287
866678	TERN 136	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	86.822
866889	TERN 137	207046 (100%)	2011/Jul/20	2012/Jul/20	GOOD	17.3428
884429	GOLD BEAR	207046 (100%)	2011/Aug/07	2012/Aug/07	GOOD	87.0967
						6,115.11

FIGURE 1A: COPPER FOX MINERAL CLAIMS MAP



4.0 LOCATION, ACCESS & GEOGRAPHY

The Schaft Creek property, located on the eastern edge of the Coast Mountain Range in northwestern British Columbia, is approximately 45 km due west of Highway 37 and 375 km northwest of Smithers, B.C., the main supply point for the project (Figure-1). The property lies approximately 1,050 km northwest of Vancouver, B.C. The map reference sheet is Energy Mines and Resources Canada topographic sheet 104G, Telegraph Creek and is covered by 1:50,000 scale topographic sheets 104G/6 and 104G/7.

The Schaft Creek deposit, within the traditional territory of the Tahltan Nation, is about 60 km south of the village of Telegraph Creek, 130 km south west of Dease Lake and 80 km southwest of the village of Iskut (Figure-2). These communities have provided a number of First Nations labourers and machine operators, diamond drillers and camp management services. Dease Lake is a local supply point for basic goods and medical facilities. Dease Lake is serviced by daily flights from Smithers on Northern Thunderbird Air from about mid-spring to mid-fall.

The Schaft Creek project is located within the Liard Mining Division and the Cassiar Iskut-Stikine Land and Resource Management Plan (LRMP) area, approximately 9 km from the southwest edge of Mt Edziza Provincial Park (Figure 3). Topography varies from high plateau between Mess Creek and upper More Creek (Arctic Lake Plateau) to steep serrated ridges in the Hankin Peak – Mathew Glacier area. Elevations range from 800 metres above sea level (“masl”) to 2,000 masl in the southern parts of the property.

Vegetation comprises of areas of boreal spruce-pine-fir forest at lower elevations, with poplar, willow and alder found near streams and bogs. Timberline is about 1,400 masl with subalpine fir and meadow areas above. Summer and winter temperatures are moderate, the temperatures range from 30ºC to -30ºC, averaging about 0ºC. Mean monthly temperatures typically remain above freezing from April to October and drop below freezing from November through March. Annual precipitation averages about 50 cm, with monthly snow accumulations exceeding 40 cm in January. Field work in the property is possible from the middle of June until the middle of October.

The Schaft Creek deposit is situated in mountainous terrain near the junction of Hickman Creek and Schaft Creek. The tops of surrounding mountains typically have year-round snowfields and small, retreating hanging valley ice fields. Schaft Creek flows northerly into Mess Creek which then flows northward to the Stikine River. Elevations in the area range from around 900 masl in the bottom of the Schaft Creek valley to over 1990 masl on Mount LaCasse.

FIGURE 2: LOCATION MAP OF THE SCHAFT CREEK PROPERTY

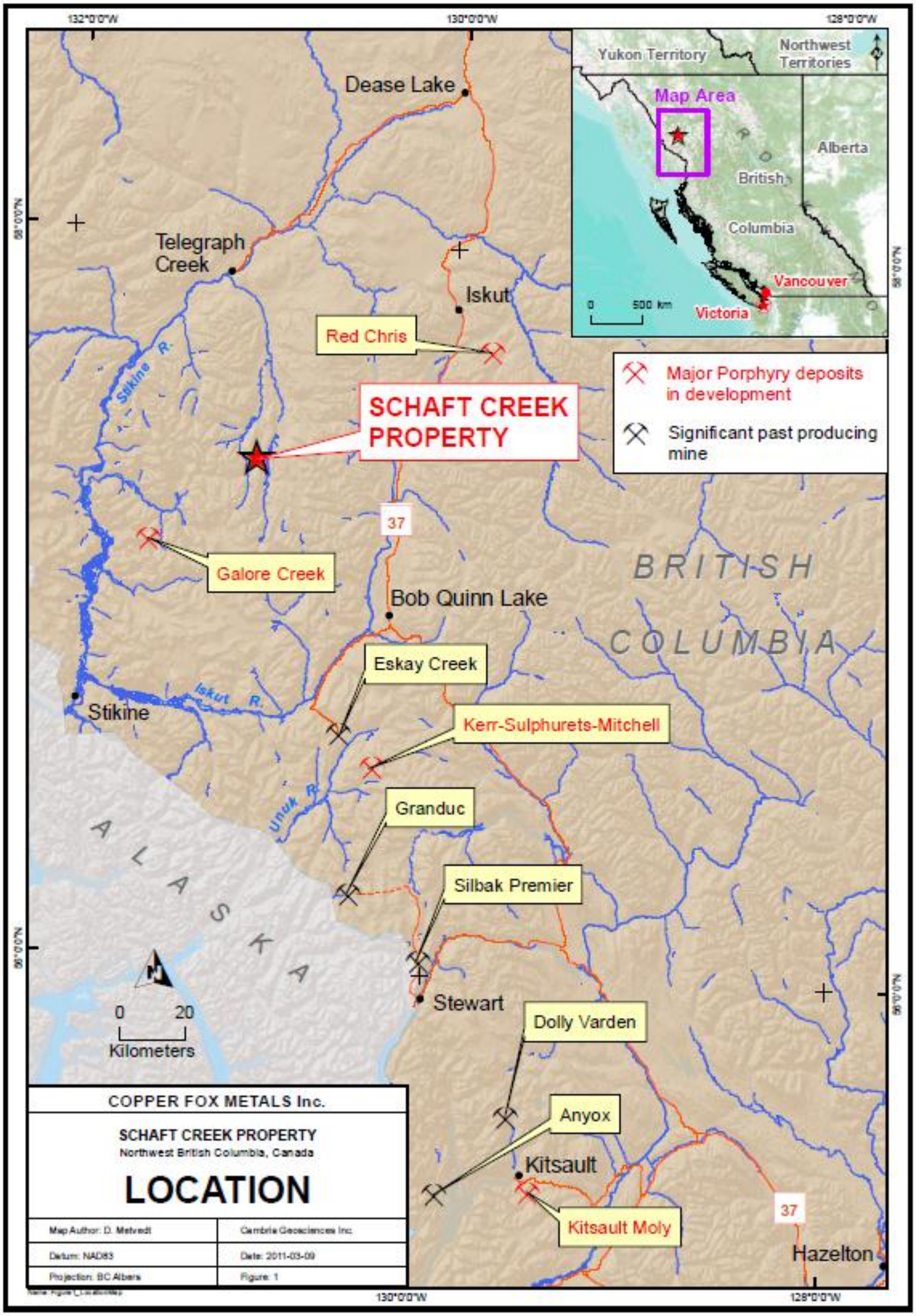
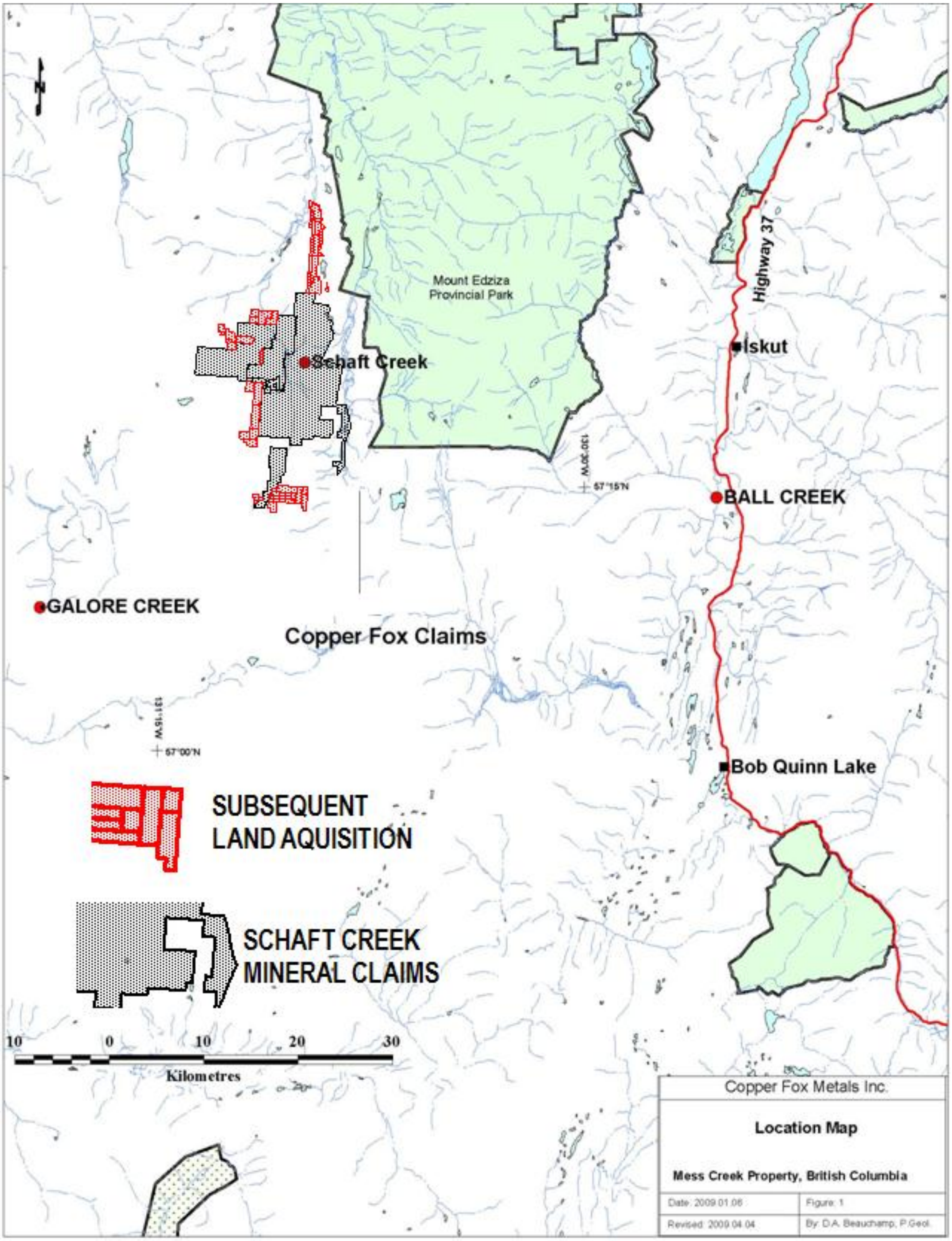


FIGURE 3: SCHAFT CREEK PROPERTY CLAIM MAP



5.0 EXPLORATION HISTORY

Mineral claims were first staked in the Schaft Creek deposit area in 1957 by prospector Nick Bird for the BIK Syndicate. Three diamond drill holes totalling 629 m were drilled in 1965 by Silver Standard Mines Ltd. In 1966, Liard Copper Mines Ltd. consolidated the mineral tenures in the area and optioned the ground to Asarco who constructed an airstrip and drilled 24 diamond drill holes totalling 3,334 m. The option was subsequently acquired by Hecla Mining Company in 1968 who explored the deposit area extensively until 1977. Over that period Hecla completed 30,891 m of diamond drilling, as well as percussion drilling, induced polarization and resistivity surveys, geological mapping, air photography, and engineering studies.

Hecla sold its interest to Teck Corporation (now Teck Resources Limited ("Teck")) in 1978, which in 1980 embarked on an aggressive exploration and drilling program to confirm and expand Hecla's work. Teck completed a total of 24,600 m of diamond drilling in 145 holes by 1981. A resource estimate prepared by Teck at that time reported the Schaft Creek deposit to contain 1 billion tonnes grading 0.30% copper and 0.034% MoS_2 (Bender and McCandlish, 2010). In 2002, Copper Fox Metals optioned the Schaft Creek property from Teck and completed the exploration and geotechnical work necessary to complete a feasibility study on the Schaft Creek project.

5.1 2011 EXPLORATION PROGRAM

During 2011, Copper Fox focused its exploration efforts on evaluating the mineral potential of the Schaft Creek project, completed additional land acquisitions, a large Titan-24 DCIP & MT survey, metallurgical test work on the mineralization from the Paramount zone and 22 diamond drill holes for various purposes totaling 9,662.3 m.

During 2011, Precision GeoSurveys Inc. completed a high resolution aeromagnetic total field magnetic survey over a large portion of the Schaft Creek project (Figure-1A). The survey specifications, survey instrumentation and data generated from the aeromagnetic survey are set out in Section 7 of this report.

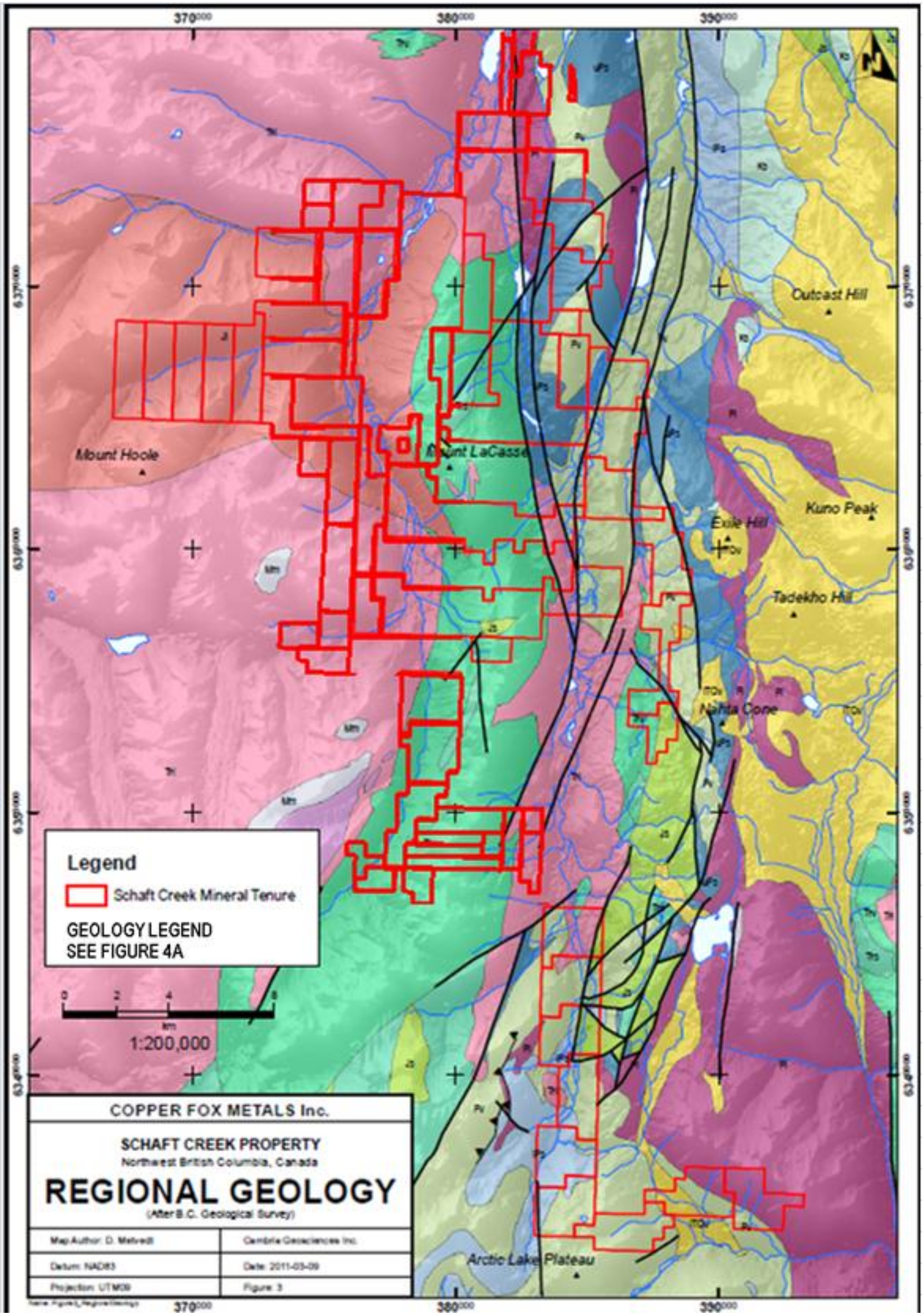
6.0 REGIONAL GEOLOGY

The Schaft Creek deposit is classified as a calc-alkaline porphyry Cu-Mo-(Au) deposit formed in a volcanic arc setting, likely on a back-arc rifted continental fragment. The deposit is hosted by Upper Triassic basaltic to andesitic volcanic rocks of the Mess Lake Facies of the Stuhini Group (Stikine Terrane) associated with porphyritic granodiorite dikes emanating from the nearby Hickman batholith (Scott, et al., 2009). A map of the regional geology is shown in Figure 4, with the geological legend for the map in Figure 4a.

The volcanic rocks consist of a northerly-striking, steeply east-dipping, layered sequence of massive porphyritic, brecciated, tuffaceous volcaniclastic and epiclastic units. The volcanic rocks and the mineralization are bounded in the west by the Hickman batholith, part of the Middle to Late Triassic-age

Stikine plutonic suite. The Hickman batholith is a complexly-zoned felsic to intermediate intrusive body and is the likely source of the hydrothermal fluids that formed the mineralization at Schaft Creek. Readers wishing more comprehensive overviews of the regional and property geology are referred to the works of Scott (2008), Scott, et al., (2009) and Logan et al. (2000).

FIGURE 4: REGIONAL GEOLOGY MAP OF THE SCHAFT CREEK PROPERTY



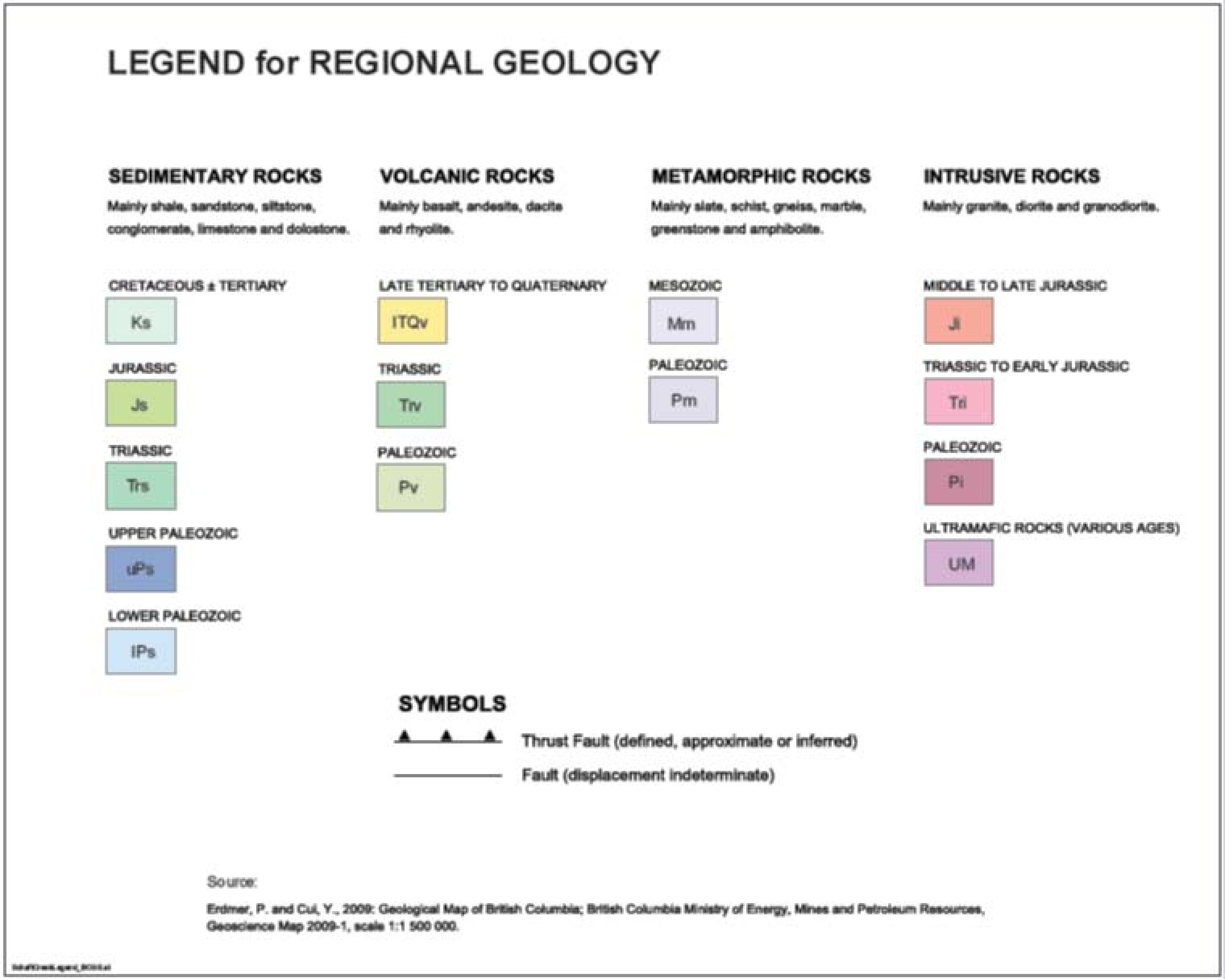


FIGURE 4A: LEGEND FOR REGIONAL GEOLOGY MAP OF THE SCHAFT CREEK PROPERTY

6.1 PROPERTY GEOLOGY

UPPER TRIASSIC STUHINI GROUP

The Schaft Creek property deposit lies in a north–south oriented complex of intermediate to mafic volcanic rocks (Stuhini Group) dominated by basalts and andesites. The volcanic sequence, estimated to be upwards of 800 m thick by Logan, et al. (2000), lies on the eastern edge of the Hickman batholith. The volcanic rocks are andesitic to basaltic and consist of various massive flows and pyroclastic deposits that dip steeply towards the east or northeast. The flows are massive and range from aphanitic to locally strongly augite-plagioclase (+/- pyroxene) phyric, while the pyroclastics vary from ash-lapilli tuff to tuff breccia. A number of outcrops of aphanitic rhyolitic volcaniclastic rocks are reported (Scott, 2008) north of the deposit area and are likely analogous to the roughly 150 m thick succession of tuffaceous siltstone-sandstone and well bedded fine-grained tuffs that comprise the upper units of the Stuhini Group.

LATE TRIASSIC INTRUSIONS

The volcanic rocks are intruded and brecciated by narrow and locally discontinuous dykes and apophyses interpreted to be emanating from the Hickman batholith. These intrusive rocks have been emplaced along variably north to northwesterly oriented structural breaks and are predominantly feldspar porphyry and feldspar quartz porphyry granodiorite.

The intrusive rocks exercised significant control on distribution and type of mineralization and alteration. However, interpreting and correlating intrusive rocks on section using textural, alteration, or mineralization criteria is difficult.

ALTERATION

The phyllic alteration typically found in porphyry deposits consists of quartz-sericite-pyrite. Although this assemblage is observed locally at the Schaft Creek deposit, the equivalent assemblage that dominates at Schaft Creek is a chlorite-sericite assemblage. The alteration is typified by partial to complete alteration of mafic minerals to chlorite, plagioclase to sericite and/or illite, and magnetite to hematite.

The chlorite-sericite assemblage imparts a pale grey-green colour to the rocks and normally over-prints or partially destroys the earlier potassic assemblage. Prophylitic alteration occurs on the outer boundaries of the mineralization.

6.2 STRUCTURE

The Schaft Creek porphyry deposit displays locally intense structural deformation with zones of gouge and broken rock locally observed in core. The near-surface levels of the deposit area are locally broken and shattered (low RQD). The earlier faults are wholly or partially annealed with variable amounts of chlorite, epidote, clay, and rock flour. In a number of instances, these larger fault zones can be traced from hole-to-hole and section-to-section. Late high angle faults may have off-set parts of the mineralized zones up to tens of metres.

The deposit is cut by several north- and northwest-trending faults. One of these faults on the west side of the deposit is referred to as the Mylonite Fault. Two additional northwest-striking faults, located south of the Mylonite Fault are interpreted through existing drill holes and appear to cut the area of the West Breccia Zone, located in the southwestern portion of the deposit. This fault locally hosts rotated fragments and abundant annealed rock flour.

The amount of movement on the northwest-striking faults is uncertain. The north to northwest trending faulting is post ore, but these structures may have exploited weakness from an older structural corridor along the intrusive - volcanic contact.

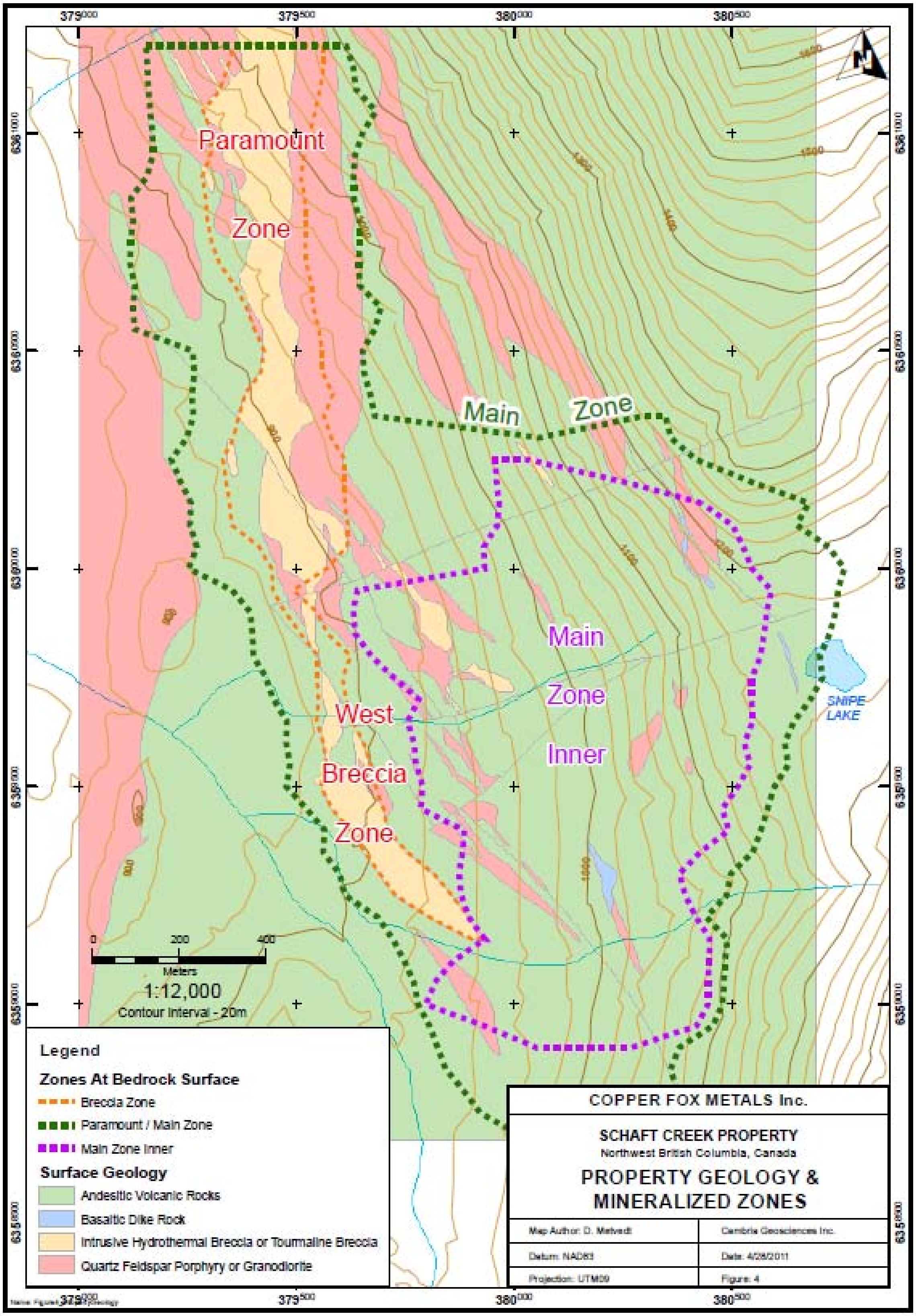
At the northeastern periphery of the Paramount Zone area, a deformation zone consists of various faults, shears, fractures and possible crush zones up to 200 m wide dipping 65° to 75° to the east. One of the fault structures may cut the north extension of the Breccia Zone in the Paramount Zone.

Only three northeast-trending cross faults are interpreted. The northeast-trending faults are interpreted as normal faults and could conceivably be related to later extensional tectonics.

6.3 MINERALIZATION

The Schaft Creek deposit consists of three sulphide-rich zones that exhibit common lithological, alteration, and mineralization features (Figure 5). Together, the Main Zone, Paramount Zone and West Breccia Zone form a deposit area roughly 2.6 km long and 1.6 km wide. The Main Zone (historically referred to as the Liard Zone) is the largest and most easterly of the three zones. The Main Zone is dominated by the presence of andesitic to basaltic volcanic rocks intruded by a series of narrow granodiorite dykes; however, it is the volcanic rocks which host the majority of mineralization.

FIGURE 5: GEOLOGY OF SCHAFT CREEK DEPOSIT



7.0 AIRBORNE MAGNETIC SURVEY

The airborne survey was performed by Precision GeoSurveys Inc. to acquire high resolution total field magnetic data. The survey was carried out between May 4, 2011 and June 2, 2011 and covered an area of 26.5 km by 17 km as shown in Figures 1A, 6, 7 and 8. The survey area is overlain on Google images of the Schaft Creek area. A total of 2,520 line kilometers of magnetic data were flown for this survey; including tie lines and survey lines. The survey lines were flown at 200 meter spacing at a $090^0/270^0$ heading; the tie lines were flown at 2 km spacing at a heading of $000^0/180^0$ (Figures 9). Figure 9 shows the UTM co-ordinates of the area covered by the airborne survey.

The total field magnetic and calculated vertical gradient maps identified the following features related to the Schaft Creek project.

a) A linear positive magnetic feature as shown on the Calculated Vertical Gradient map with a 20 kilometre strike length. The Schaft Creek deposit, the ES and GK zones of copper mineralization occur immediately adjacent to this positive magnetic feature,
b) The airborne magnetic survey has identified 3 distinct positive magnetic signatures that correlate with the Schaft Creek deposit and the ES and GK zones of copper mineralization,
c) The airborne magnetic signature over the Schaft Creek deposit correlates well with previously completed Quantec Titan-24 DCIP and MT survey results suggests that the Schaft Creek deposit could extend for an additional 1,000 metres to the south.

FIGURE 6: SCHAFT CREEK PROPERTY AREA LOCATION RELATIVE TO TELEGRAPH CREEK, BC

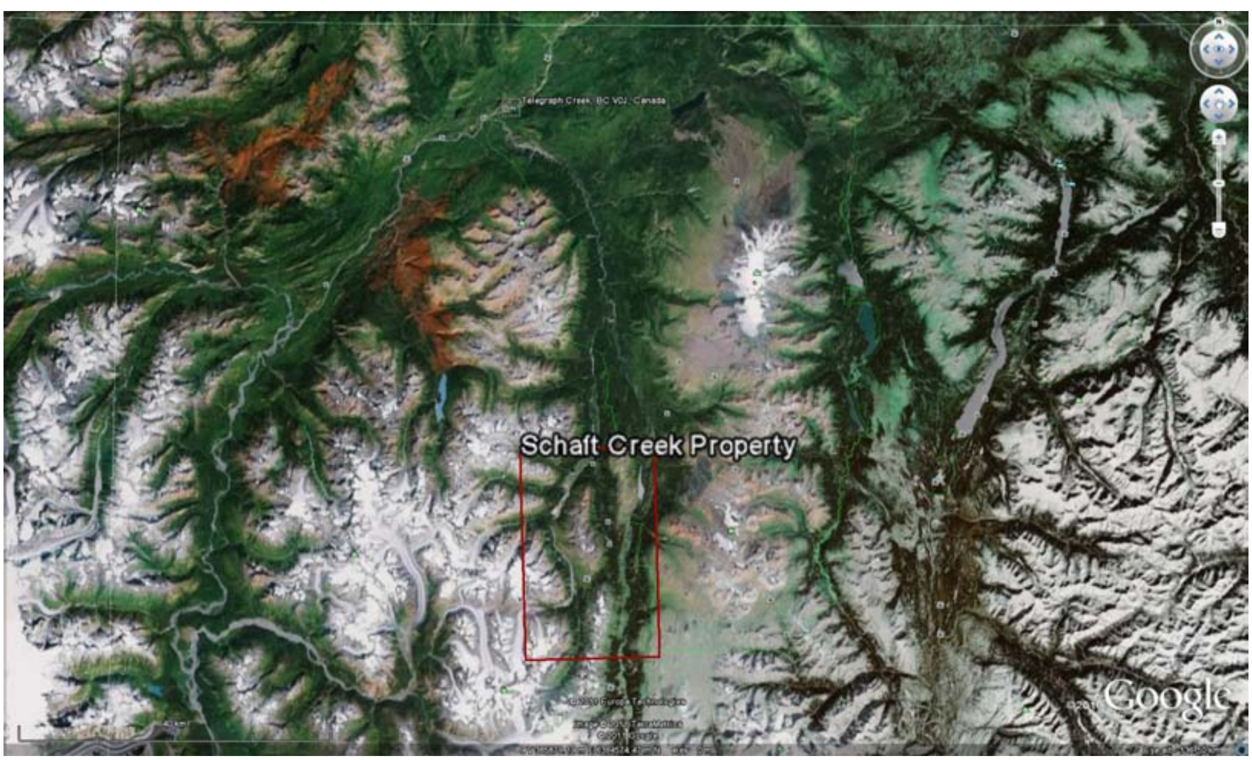


FIGURE 7: PLAN VIEW OF SURVEY. SURVEY AND TIE LINES OUTLINED IN YELLOW. SURVEY BOUNDARY OUTLINED IN RED

FIGURE 8: TERRAIN VIEW. SURVEY AND TIE LINES OUTLINED IN YELLOW. SURVEY BOUNDARY OUTLINED IN RED

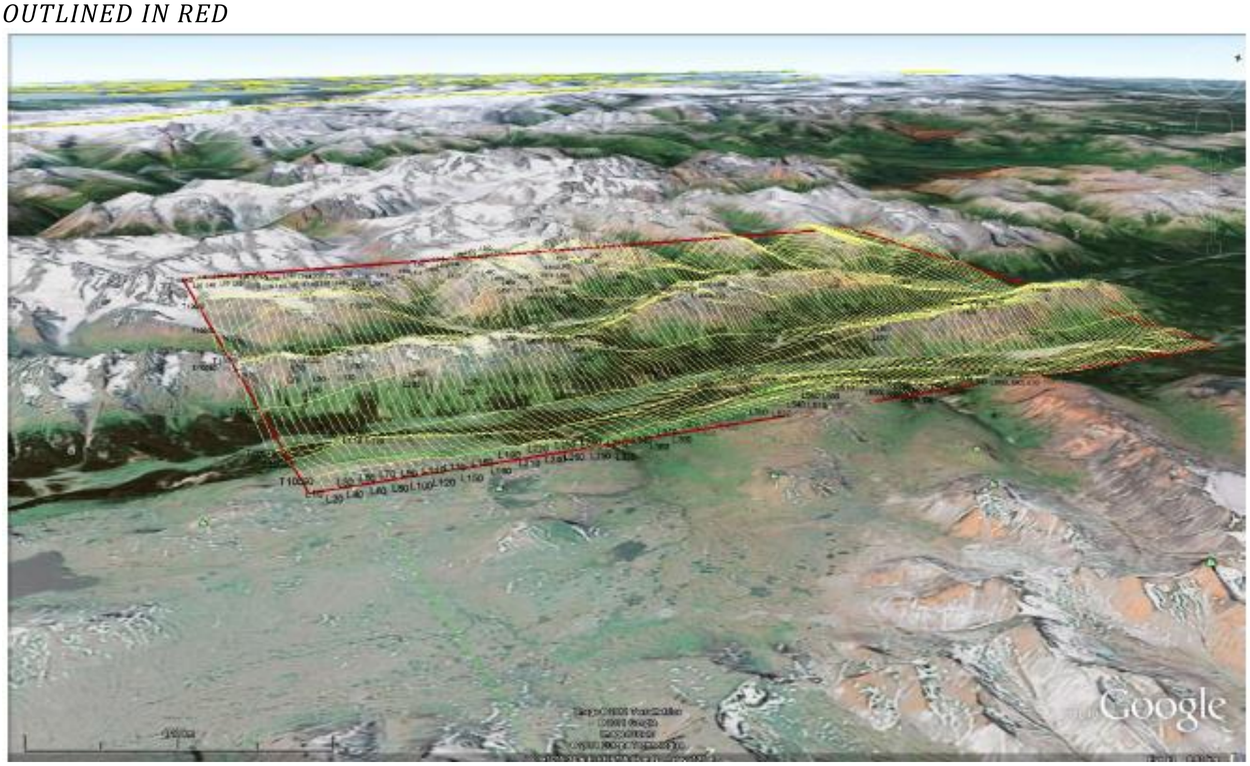
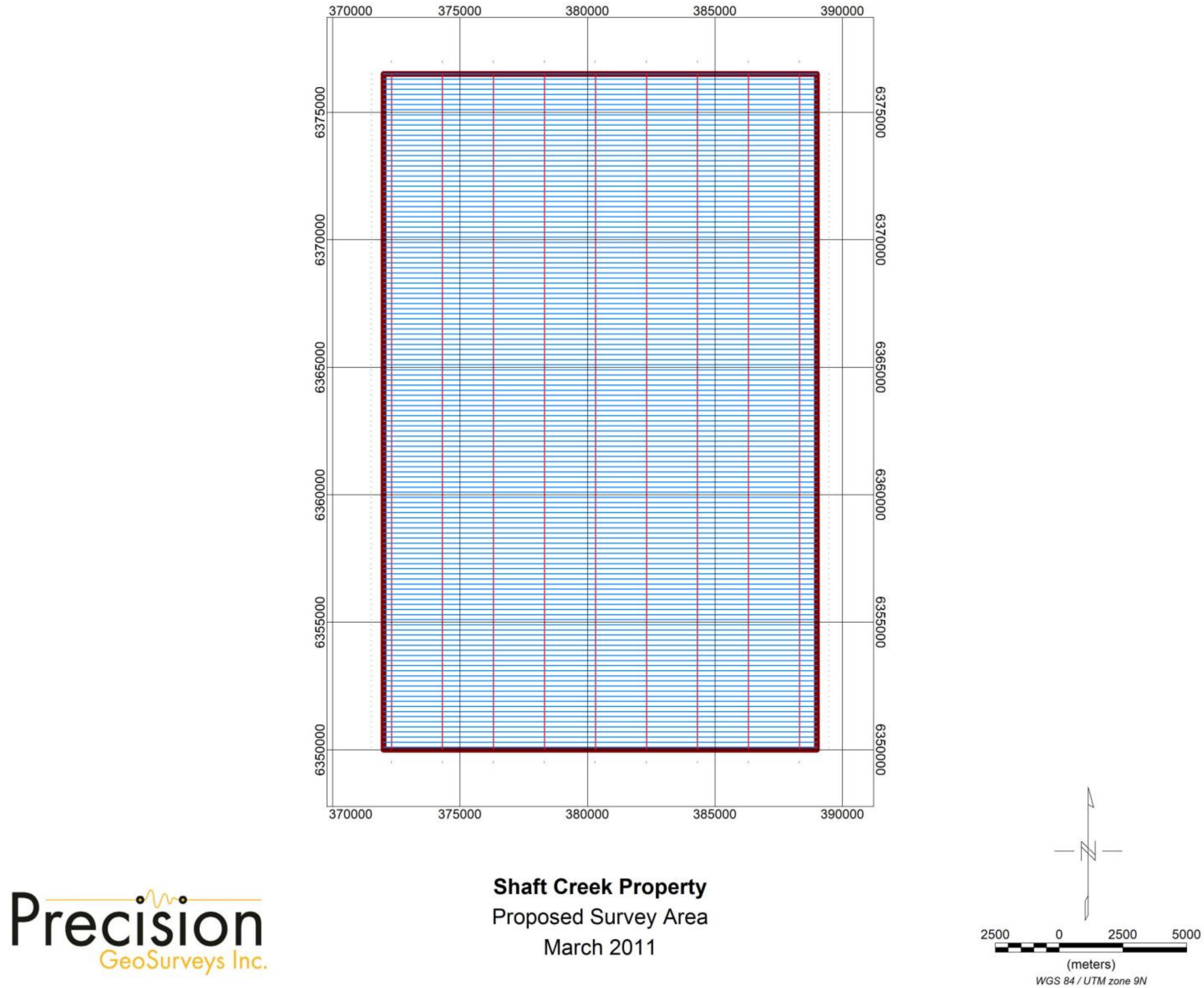


FIGURE 9: SURVEY AREA (SURVEY LINES MARKED IN BLUE. TIE LINES AND THE BOUNDARY OF SURVEY MARKED IN RED)



7.1 SURVEY SPECIFICATIONS

The geodetic system used for this survey is WGS 84 and the area is contained in NAD 83, Zone 9N. The survey data acquisition specifications and coordinates for Shaft Creek survey are specified as set out in (Table 2 and Table 3).

TABLE 2: SCHAFT CREEK SURVEY ACQUISITION SPECIFICATIONS

Survey Block	Line Spacing, m	Survey Line, km	Tie Line, km	Total Line, km	Survey Line Orientation	Nominal Survey Height, m
Schaft Creek	200	2,280	240	2,520.00	$090^0/270^0$	35
Total				2,520.00		

TABLE 3: SURVEY CO-ORDINATES USING WGS 84 IN ZONE 9N

Longitude	Latitude	Easting	Northing
131.13676	57.51294	372000	6376500
130.853154	57.517424	389000	6376500
130.84118	57.279501	389000	6350000
131.122957	57.275057	372000	6350000

7.2 SURVEY OPERATIONS

Precision GeoSurveys Inc. flew the Schaft Creek Project block using a Bell 206 Jet Ranger (Figure 10). The survey lines were flown at a nominal line spacing of two hundred (200) meters and the tie lines were flown at 2 km spacing. cThe average survey elevation was 39 meters vertically above ground.

FIGURE 10: BELL 206 JET RANGER EQUIPPED IN STINGER CONFIGURATION FOR MAGNETIC DATA ACQUISITION

7.3 EQUIPMENT

For this survey, a magnetometer, base station, laser altimeter, and a data acquisition system were used to carry out the survey and collect quality, high resolution magnetic data. cThe survey magnetometer is carried in an approved "stinger" configuration to enhance flight safety and improve data quality in this mountainous terrain. Detail description and specification are shown in Appendix 1.

7.4 DATA PROCESSING

Several procedures are undertaken daily on site to ensure that the data met a high standard of quality. All data were processed using PicoEnvirotec software and Geosoft Oasis Montaj geophysical processing software.

7.5 DATA ACQUISITION

During aeromagnetic surveying noise is introduced to the magnetic data by the aircraft itself. Movement in the aircraft (roll, pitch and yaw) and the permanent magnetization of the aircraft parts (engine and other ferric objects) are large contributing factors to this noise. To remove this noise a process called magnetic compensation was implemented. The magnetic compensation process starts with a test flight at the beginning of the survey where the aircraft flies in the four orthogonal headings required for the survey ($002^0/183^0$ and $090^0/267^0$ in the case of this survey) at an altitude where there is no ground effect in the magnetic data. In each heading, specified roll, pitch and yaw maneuvers are performed by the pilot; these maneuvers provide the data that are required to calculate the necessary parameters for compensating the magnetic data. A computer program called PEIComp is used to create a model for each survey to remove the noise induced by aircraft movement; this model is applied to each survey flight before the data is further processed.

A magnetic base station was used to ensure that diurnal activity is recorded during the survey. Base station readings were reviewed at regular intervals to ensure that no data were collected during periods with high diurnal activity (greater than 5 nT per minute). The base station was installed within the survey area at a magnetically noise-free area, away from metallic items such as steel objects, vehicles, or power lines. The magnetic variations recorded from the stationary base station are removed from the magnetic data recorded in flight to ensure that the anomalies seen are real and not due to solar activity.

Some filtering of the magnetic data was also required. A Non Linear filter was used for spike removal. The 1D Non-Linear Filter is ideal for removing very short wavelength, but high amplitude features from data. It is often thought of as a noise spike-rejection filter, but it can also be effective for removing short wavelength geological features, such as signals from surficial features. The 1D Non-Linear Filter is used to locate and remove data that are recognized as noise. The algorithm is 'non- linear' because it looks at each data point and decides if that datum is noise or a valid signal. If the point is noise, it is simply removed and replaced by an estimate based on surrounding data points. Parts of the data that are not considered noise are not modified. The combination of a Non-Linear filter for noise removal and a low pass trend enhancement filter resulted in level data as indicated in the results section of this report. The low pass filters simply smoothes out the magnetic profile to remove isolated noise.

Filtering is also applied to the laser altimeter data to remove vegetation clutter and to show actual ground clearance. To remove vegetation clutter a rolling statistic filter was applied to the laser altimeter data and a low pass filter was used to smooth out the laser altimeter profile to remove isolated noise. As a result, filtering the data will yield a more uniform surface in close conformance with the actual terrain.

A lag correction of 1.7 seconds was applied to the total magnetic field data to compensate for the lag in the recording system as the magnetometer sensor flies 6.45 m ahead of the GPS antenna.

7.6 DATA FORMAT

The data file was provided in two (2) formats, the first will be a .GDB file for use in Geosoft Oasis Montaj, the second format will be a .XYZ file (Appendix 2), this is text file. A complete file provided in each format will contain only magnetic data.

Abbreviations used in the GDB files are as follows:

- X – Easting in WGS84, UTM zone 9N;
- Y – Northing in WGS84, UTM zone 9N;
- galt – GPS altimeter readings;
- lalt – laser altimeter readings;
- dtm – digital terrain model;
- GPStime – GPS time;
- basemag – diurnal data;
- mag – total magnetic field.

APPENDIX 1 - SURVEY EQUIPMENT AND SPECIFICATION

AGIS:

The Airborne Geophysical Information System, AGIS, (Photo 1), is the main computer used in data recording, data synchronizing, displaying real-time QC data for the geophysical operator, and generation of navigation information for the pilot display system.

Photo 1: AGIS installed in the Bell 206

Pico Envirotec AGIS-L data recorder system
(for Navigation, Gamma spectrometer, VLF-EM and Magnetometer Data Acquisition)

Functions	Airborne Geophysical Information System (AGIS) with integrated Global Positioning System Receiver (GPS) and all necessary navigation guidance software. Inputs for geophysical sensors - portable gamma ray spectrometer GRS-10, MMS4 Magnetometer, Totem 2A EM, A/D converter, temperature probe, humidity probe, barometric pressure probe, and laser altimeter. Output for the 2 line Pilot Indicator
Display	Touch screen with display of 800 x 600 pixels; customized keypad and operator keyboard. Multi-screen options for real-time viewing of all data inputs, fiducial points, flight line tracking, and GPS channels by operator.
GPS Navigation	Garmin 12-channel, WAAS-enabled
Data Sampling	Sensor dependent
Data Synchronization	Synchronized to GPS position
Data File	PEI Binary data format
Storage	80 GB
Supplied Software	**PEIView:** Allows fast data Quality Control (QC) **Data Format:** Geosoft GBN and ASCII output **PEIConv**: For survey preparation and survey plot after data acquisition
Software	**Calibration:** High voltage adjustment, linearity correction coefficients calculation, and communication test support **Real Time Data Collection:** Automatic Gain real time control on natural isotopes and PC based test and calibration software suite
Power Requirements	24 to 32 VDC
Temperature	Operating:-10 to +55 deg C; storage:-20 to +70 deg C

MAGNETOMETER:

The magnetometer used by Precision GeoSurveys is a Scintrex cesium vapor CS-3magnetometer. The system was housed in a front mounted “stinger” (Photo 2). The CS-3 is a high sensitivity/low noise magnetometer with automatic hemisphere switching and a wide voltage range, the static noise rating for the unit is +/- 0.01 nT. On the AGIS screen the operator can view the raw magnetic response, the magnetic fourth difference, aircraft position, and the survey altitude for immediate QC of the magnetic data. The magnetic data are recorded at 10 Hz. A magnetic compensator is also used to remove noise created by the movement of the helicopter as it pitches, rolls and yaws within the Earth’s geomagnetic field.

Photo 2: View of the mag stinger

Scintrex CS-3 Survey Magnetometer

Operating Principal	Self-oscillation split-beam Cesium Vapor (non-radioactive Cs-133)
Operating Rage	15,000 to 105,000 nT
Gradient Tolerance	40,000 nT/metre
Operating Zones	10° to 85° and 95° to 170°
Hemisphere Switching	a) Automatic b) Electronic control actuated by the control voltage levels (TTL/CMOS) c) Manual
Sensitivity	0.0006 nT √Hz rms.
Noise Envelope	Typically 0.002 nT P-P, 0.1 to 1 Hz bandwidth
Heading Error	+/- 0.25 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy	<2.5 nT throughout range
Output	a) continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the power supply voltage b) square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth	Only limited by the magnetometer processor used
Sensor Head	Diameter: 63 mm (2.5") Length: 160 mm (6.3") Weight: 1.15 kg (2.6 lb)
Sensor Electronics	Diameter: 63 mm (2.5") Length: 350 mm (13.8") Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics	3m (9' 8"), lengths up to 5m (16' 4") available
Operating Temperature	-40°C to +50°C
Humidity	Up to 100%, splash proof
Supply Power	24 to 35 Volts DC
Supply Current	Approx. 1.5A at start up, decreasing to 0.5A at 20°C
Power Up Time	Less than 15 minutes at -30°C

BASE STATION:

For monitoring and recording of the Earth's diurnal magnetic field variation, Precision GeoSurveys uses two base stations: Scintrex proton precession Envi Pro magnetometer and GEM GSM-19T magnetometer. Both base stations are mounted as close to the survey block as possible to give accurate magnetic field data. The Envi Pro base station (Photo 3) uses the well proven precession technology to sample at a rate of 0.5 Hz. A GPS is integrated with the system to record real GPS time that is used to correlate with the GPS time collected by the airborne CS-3 magnetometer.

Photo 3: Scintrex Envi Pro proton precession magnetometer

The GEM GSM-19T magnetometer (Photo 4) also uses the proton precession technology sampling at a rate of 0.5 Hz. The GSM-19T has an accuracy of +/- 0.2 nT at 1 Hz.

Photo 4: GEM GSM-19T proton precession magnetometer.

GEM GSM-19T Proton Precession Magnetometer (Base Station)

Configuration Options	15
Cycle Time	999 to 0.5 sec
Environmental	-40 to 60 ° Celsius
Gradient Tolerance	7,000 nT/m
Magnetic Readings	299,593
Operating Range	10, 000 to 120,000 nT
Power	12 V @ 0.62 A
Sensitivity	0.1 nT @ 1 sec
Weight (Console/ Sensor)	3.2 Kg
Integrated GPS	Yes

Scintrex Envi Pro Proton Magnetometer with Integrated GPS (Base Station)

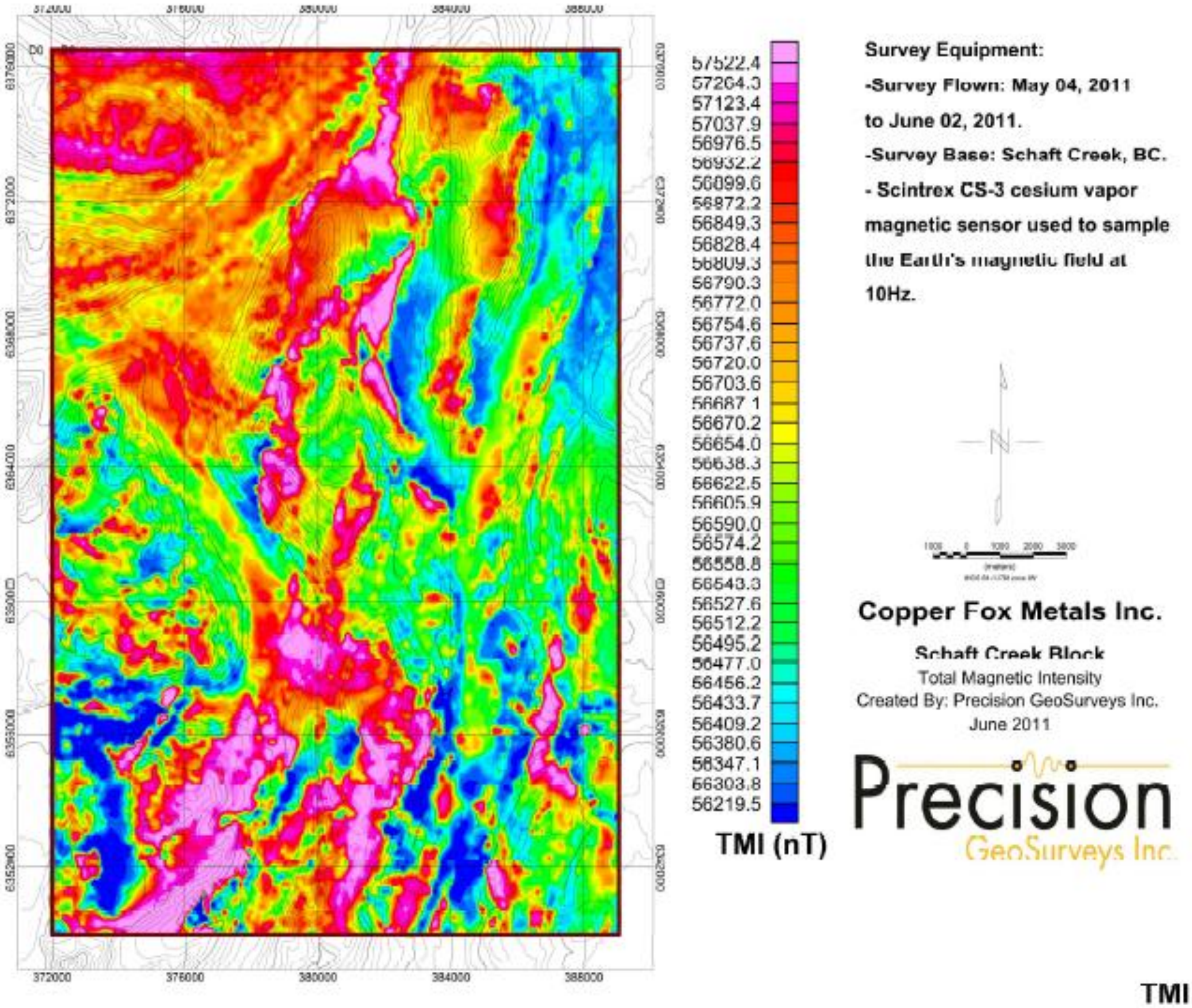
Total Field Operating Range	23,000 to 100,000 nT (gamma)
Total Field Absolute Accuracy	±1 nT (gamma)
Sensitivity	0.1 nT (gamma) at 2 second sampling rate
Tuning/ Sampling	Fully solid state. Manual or automatic, keyboard selectable Cycling (Reading) Rates 0.5, 1, 2, or 3 seconds
Gradiometer Option	Includes a second sensor, 0.5m (20 inch) staff extender and processor module
Gradient Tolerance	> 7000 nT (gamma)/m
'Walking' Mode	Continuous reading, cycling as fast as 0.5 seconds
Supplied GPS Accuracy	+/- 1m (Autonomous), < 1m WAAS Connects to most external GPS receivers with NMEA & PPS output
Standard Memory	**Total Field Measurements**: 84,000 readings **Gradiometer Measurements**: 67,000 readings **Base Station Measurements**: 500,000 readings
Real-Time Clock	1 second resolution, ± 1 second stability over 24 hours or GPS time
Digital Data Output	RS-232C, USB Adapter
Power Supply	Rechargeable, 2.9 Ah, lead-acid dry cell battery 12 Volts External 12 Volt input for base station operations
Operating Temperature	40°C to +60°C (-40°F to 140°F)
Dimensions and Weight	**Console**: 250mm x 152mm x 55mm (10" x 6" x 2.25") 2.45 kg (5.4 lbs) with rechargeable battery **Magnetic** 70mm d x 175mm (2.75"d x 7") **Sensor**: 1 kg (2.2 lbs) **Gradiometer** 70mm d x 675mm (2.75"d x 26.5") **Sensor**: (with staff extender) 1.15 kg (2.5 lbs) **Sensor Staff**: 25mm d x 2m (1"d x 76") 0.8 kg (1.75 lbs)

LASER ALTIMETER:
The pilot is provided with terrain guidance and clearance with an Acuity AccuRange AR3000 laser altimeter (Photo 5). This is attached at the aft end of the magnetometer boom. The AR3000 sensor is a time-of-flight sensor that measures distance by a rapidly modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 300 m off of natural surfaces with 90% reflectance and 3 km off special reflectors. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and analog outputs, the distance data are transmitted and collected by the AGIS at 10 Hz.

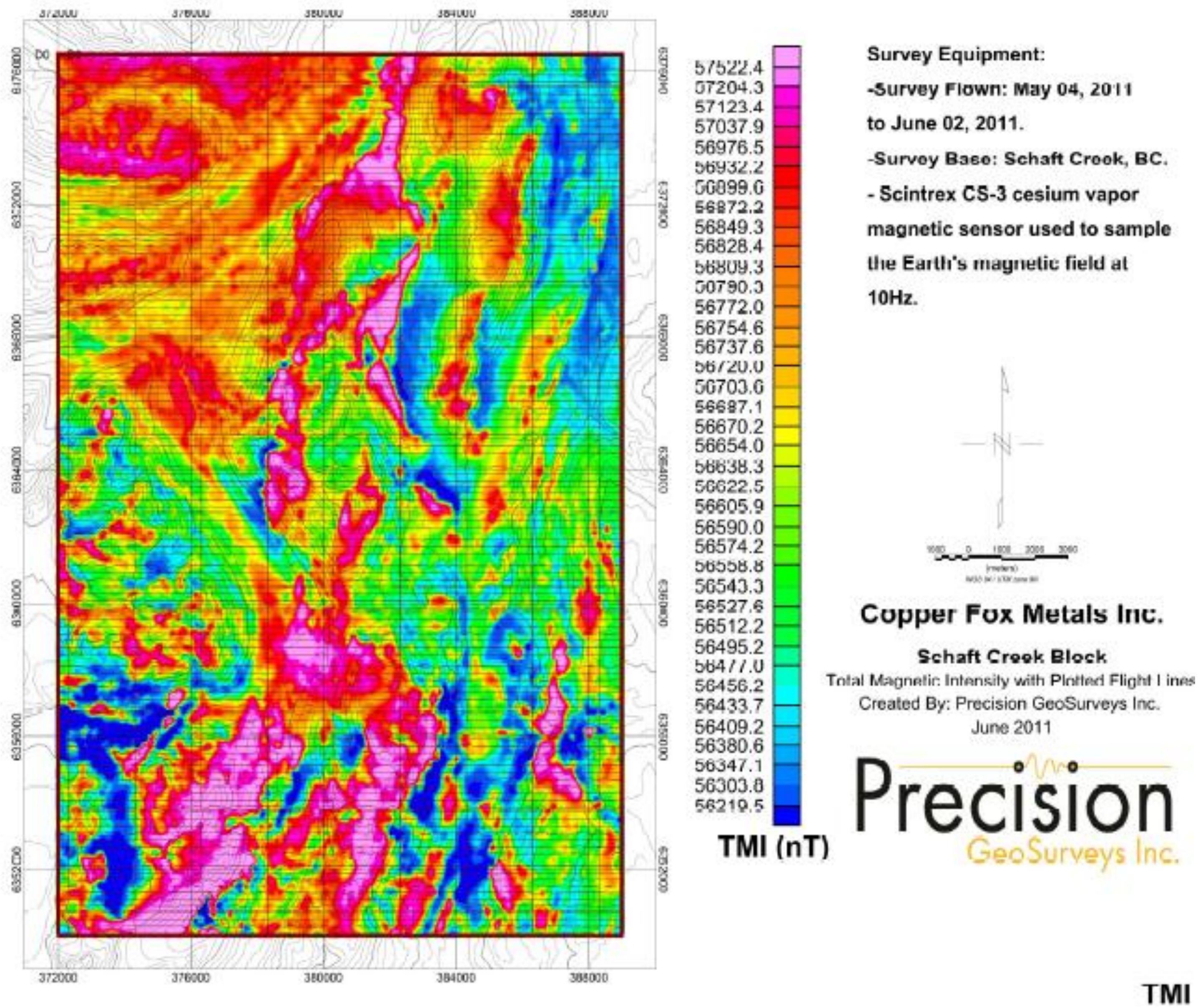
Photo 5: Acuity AccuRange AR3000 laser altimeter.

APPENDIX 2 – SURVEY MAPS

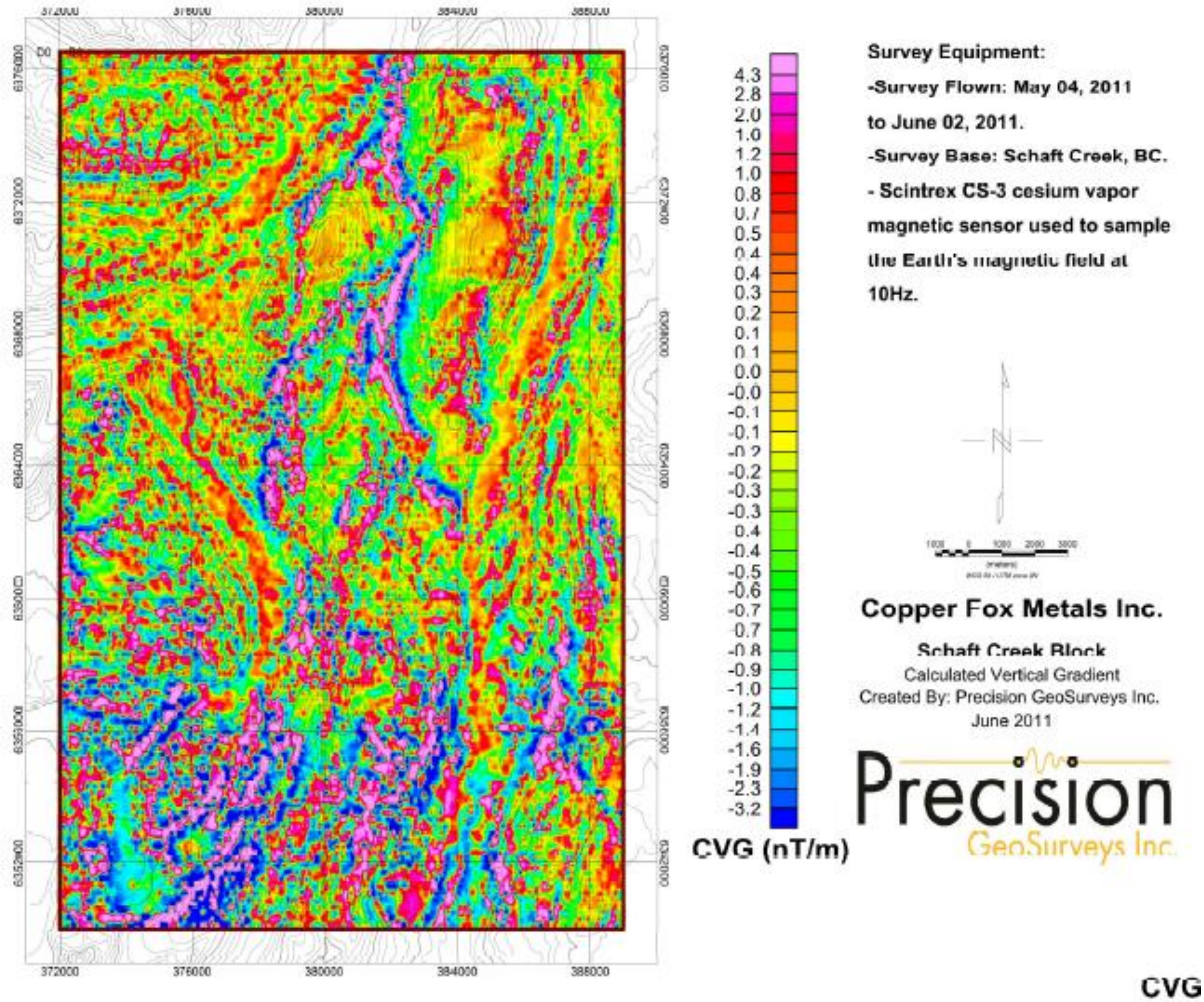
Map 1: Schaft Creek Property Total Magnetic Intensity (TMI)



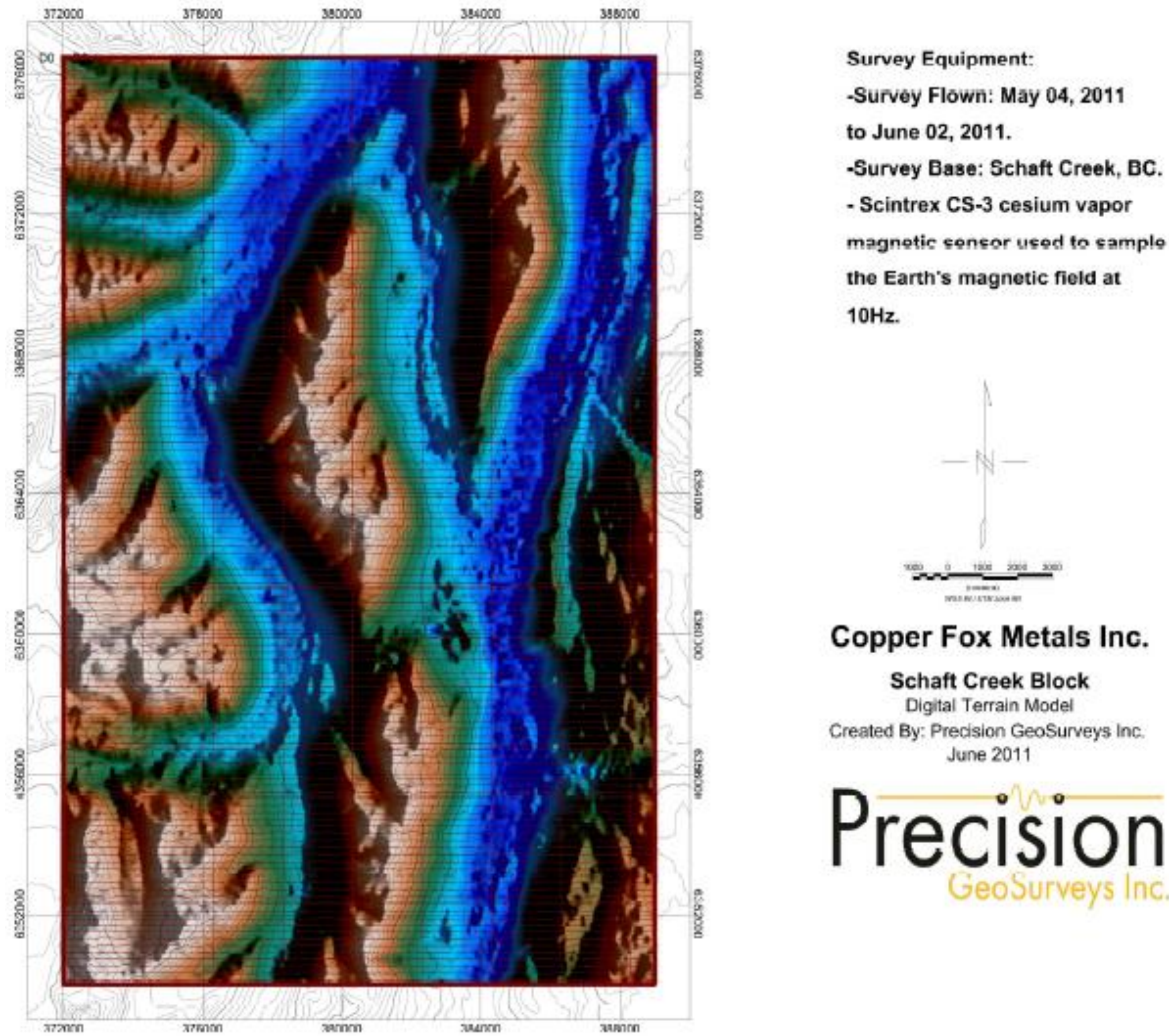
Map 2: Schaft Creek Property Total Magnetic Intensity with Plotted Flight Lines



Map 3: Schaft Creek Property Calculated Vertical Gradient



Map 4: Schaft Creek Property Digital Terrain Model (DTM)



DTM

APPENDIX 3 - PERSONNEL

PERSONNEL

Shane Groves, Don Plattel, and Harmen Keyser – Pilots
Mike Jensen - Operator
Shawn Walker – Operator / On-site Geophysicist
Jenny Poon – Operator / On-site Geophysicist

SUPPORT & ADMINISTRATION

Elmer Stewart
Janna Tanski
Lynn Ball

APPENDIX 4 – COST STATEMENT

Exploration Work type	**Comment**	**Days**			**Totals**
Personnel (Name)* / Position	**Field Days (list actual days)**	**Days**	**Rate**	**Subtotal***	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
			$0.00	$0.00	
				$0.00	**$0.00**
Office Studies	**List Personnel (note - Office only, do not include field days**				
Literature search			$0.00	$0.00	
Database compilation			$0.00	$0.00	
Computer modelling			$0.00	$0.00	
Reprocessing of data			$0.00	$0.00	
General research			$0.00	$0.00	
Report preparation			$0.00	$0.00	
Other (specify)				$0.00	
				$0.00	**$0.00**
Airborne Exploration Surveys	**Line Kilometres / Enter total invoiced amount**				
Aeromagnetics	2,520		$202,779.00	$202,779.00	
Radiometrics			$0.00	$0.00	
Electromagnetics			$0.00	$0.00	
Gravity			$0.00	$0.00	
Digital terrain modelling			$0.00	$0.00	
Other (specify)			$0.00	$0.00	
				$202,779.00	**$202,779.00**
TOTAL Expenditures					**$202,779.00**

APPENDIX 5 – STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATION

I, ELMER B STEWART, MSc., P. Geol, certify that:

1. I am President and CEO for Copper Fox Metals Inc. with a business address located at: 650, 340 – 12 Avenue SW, Calgary, AB T2R 1L5

2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of Alberta (Member Number 34563).

3. I graduated from Acadia University in Wolfville, Nova Scotia in 1974 and from Acadia University with a Master of Science degree in 1977.

4. Since 1977 I have been continuously employed in exploration for base and precious metals in North America, Central America, South America, Africa, Central Europe and Central Asia.

5. I supervised the 2011 exploration program at the SCHAFT CREEK property and am therefore familiar with the geology of the SCHAFT CREEK property and the work conducted in 2011. I have prepared all sections of this report.

Dated this 20th day of March 2012

____

Signature

Elmer B Stewart, MSc., P. Geol

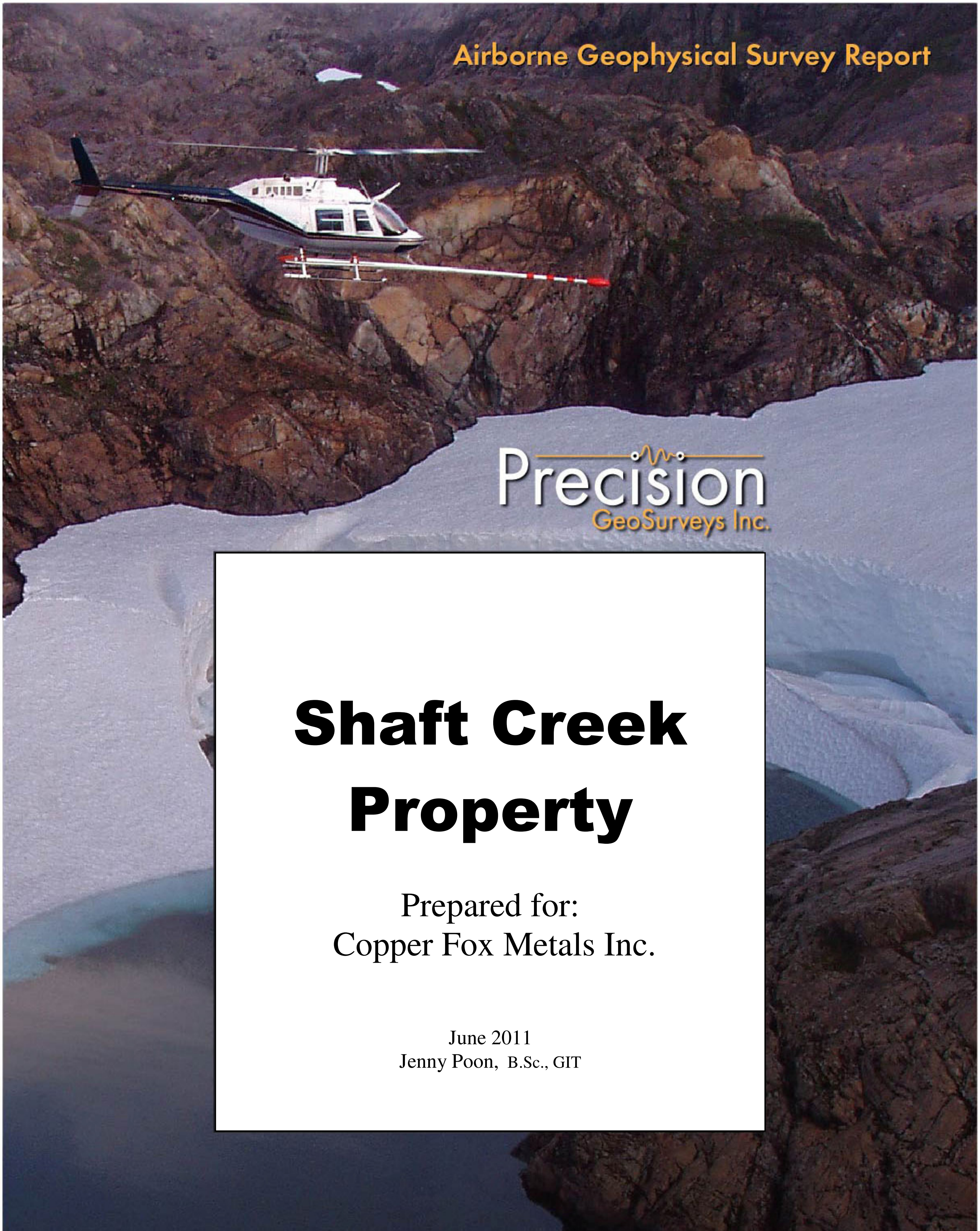
REFERENCES

Bender, M. and McCandlish K., 2010: Amended Technical Report: Preliminary Feasibility Study on the Development of the Schaft Creek Project Located in Northwest British Columbia, Canada – Effective Date: September 15, 2008; as posted on http://www.copperfoxmetals.com/s/SchaftCreek.asp?ReportID=209032.

Erdmer, P. and Cui, Y., 2009: Geological Map of British Columbia; BC Ministry of Energy, Mines and Petroleum Resources, Geoscience Map 2009-1, scale 1:1,500,000.

Logan, J.M., Drobe, J.R., and McClelland, W.C., 2000: Geology of the Forrest Kerr – Mess Creek Area, Northwestern British Columbia (104B/10, 15, & 104G/2 &7W), Bulletin 104, Geological Survey Branch, Energy and Minerals Division, BC Ministry of Energy and Mines.

Scott, J.E., 2008, The Schaft Creek Porphyry Cu-Au-Mo-Ag Deposit, Northwestern British Columbia, M.Sc. Thesis, Dept. of Earth and Atmospheric Science, University of Alberta.



Airborne Geophysical Survey Report

Precision GeoSurveys Inc.

Shaft Creek Property

Prepared for:
Copper Fox Metals Inc.

June 2011
Jenny Poon, B.Sc., GIT

Table of Contents

Introduction:

This report outlines the survey operations and data processing actions taken during the airborne geophysical survey flown at Schaft Creek (Figure 1). The airborne geophysical survey was flown by Precision GeoSurveys Inc. for Copper Fox Metals Inc. The geophysical survey, carried out between May 04, 2011 and June 02, 2011, saw the acquisition of high resolution magnetic data.

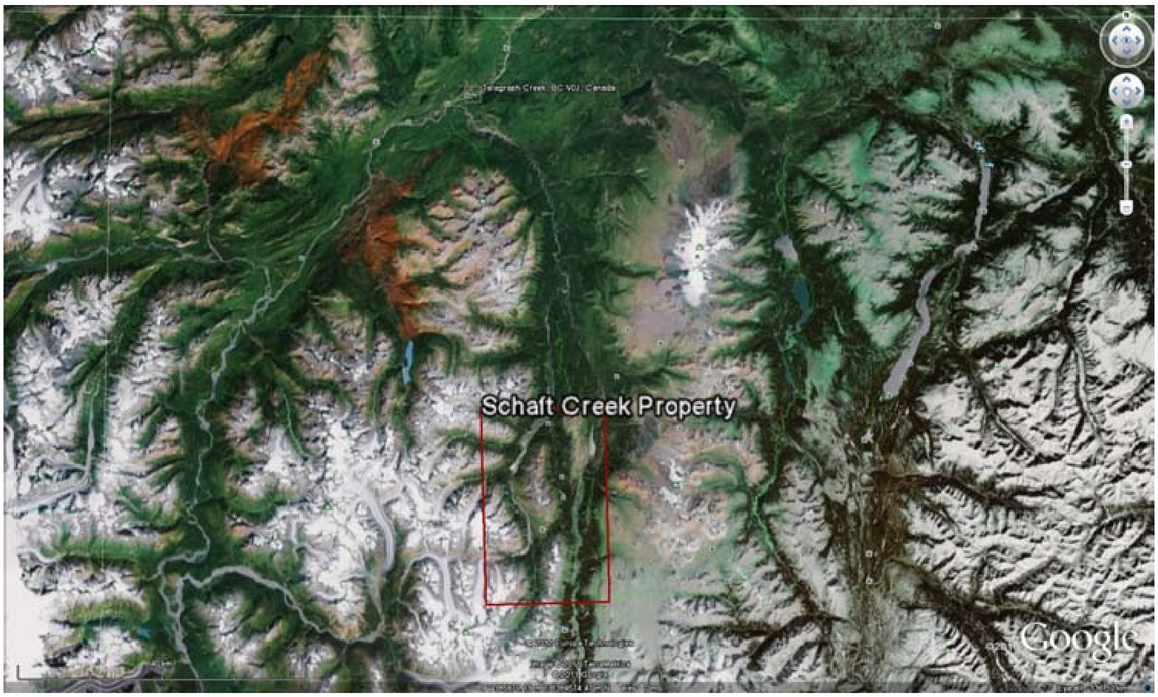


Figure 1: Schaft Creek Property area location relative to Telegraph Creek, BC.

The Schaft Creek property is located approximately 45 kilometers west of the Stewart-Cassiar Highway and approximately 80 kilometres south of Telegraph Creek in north western British Columbia. The survey area itself is approximately 26.5 km by 17 km (Figure 2). A total of 2520 line kilometers of magnetic data were flown for this survey; this total includes tie lines and survey lines. The survey lines were flown at 200 meter spacings at a $090^{o}/270^{o}$ heading; the tie lines were flown at 2 km spacings at a heading of $000^{o}/180^{o}$ (Figures 3 & 4).

Figure 2: Survey and tie lines outlined in yellow and the boundary in red in plane view.

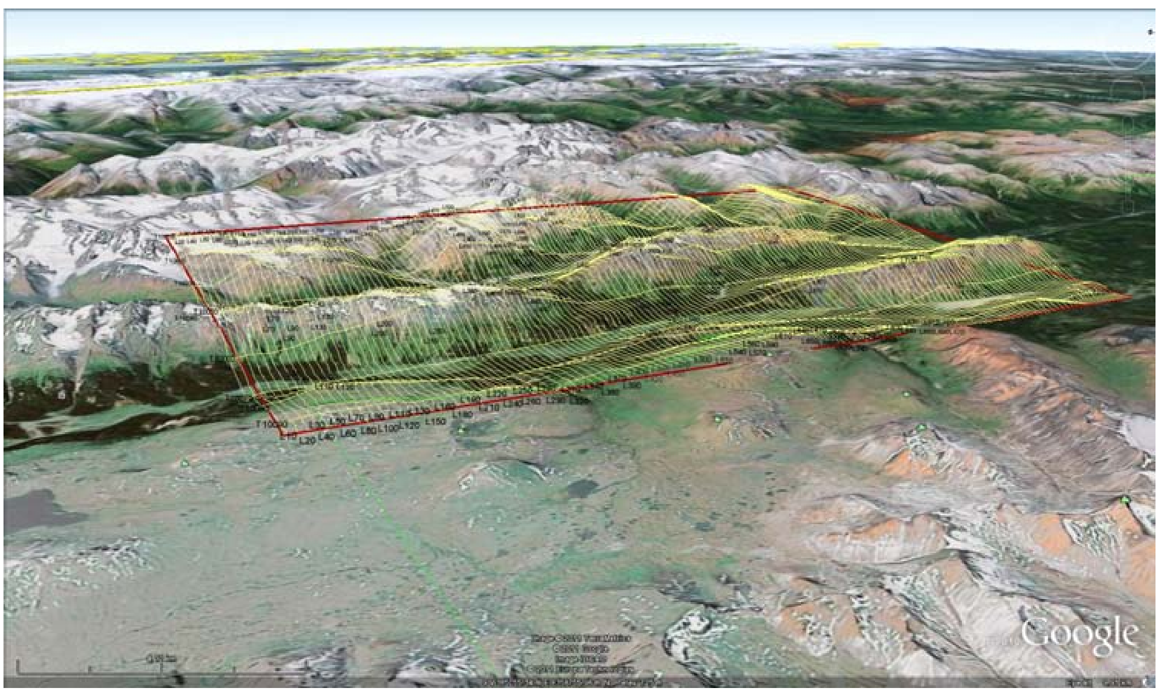


Figure 3: Survey and tie lines outlined in yellow and the boundary in red in terrain view.

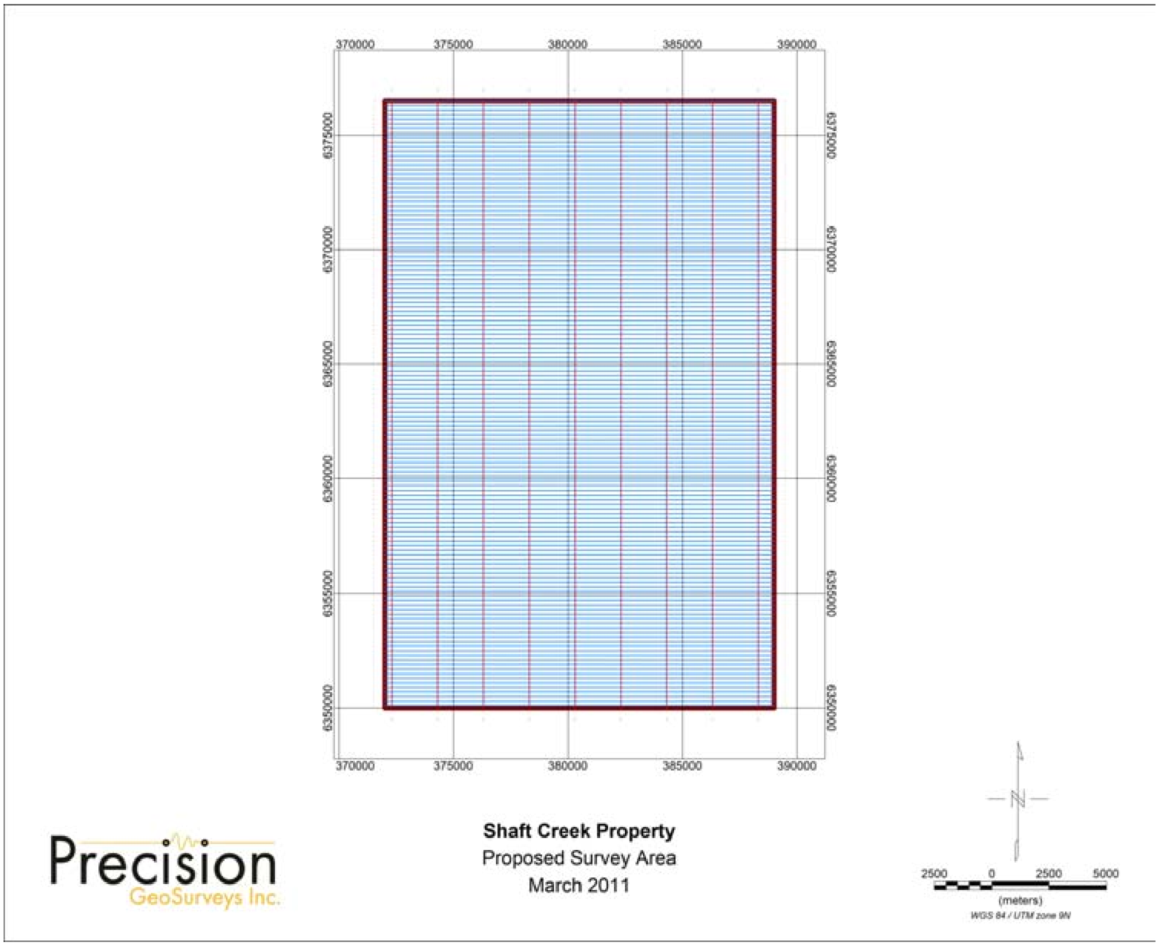


Figure 4: Proposed survey basemap showing survey and tie lines and the boundary in red.

Survey Specifications:

The geodetic system used for this survey is WGS 84 and the area is contained in zone 9N. The survey data acquisition specifications and coordinates for the Schaft Creek survey are specified as followed (Table 1 and Table 2).

Survey Block Name	Line Spacing m	Survey Line km	Tie Line km	Total Line km	Survey Line Orientation	Nominal Survey Height m
Schaft Creek	200	2280	240	2520	090-270º	35
Total				2520		

Table 1: Schaft Creek survey acquisition specifications.

Longitude	Latitude	Easting	Northing
131.1367601	57.51293993	372000	6376500
130.853154	57.51742413	389000	6376500
130.84118	57.27950066	389000	6350000
131.1229567	57.27505707	372000	6350000

Table 2: Schaft Creek survey polygon coordinates using WGS 84 in zone 9N.

2.0 Geophysical Data:

Geophysical data are collected in a variety of ways and are used to aid in the exploration and determination of geology, mineral deposits, oil and gas deposits, contaminated land sites and UXO detection.

For the purposes of this survey, airborne magnetic data were collected to serve in the exploration of the Schaft Creek Property which contains rocks that are prospective for copper and gold mineralization.

2.1 Magnetic Data:

Magnetic surveying is probably the most common airborne survey type to be conducted for both mineral and hydrocarbon exploration. The type of survey specifications, instrumentation, and interpretation procedures, depend on the objectives of the survey. Typically magnetic surveys are performed for:

1. Geological Mapping to aid in mapping lithology, structure and alteration in both hard rock environments and for mapping basement lithology, structure and alteration in sedimentary basins or for regional tectonic studies.
2. Depth to Basement mapping for exploration in sedimentary basins or mineralization associated with the basement surface.

3.0 Survey Operations:

Precision GeoSurveys flew the Schaft Creek Property using a Bell 206 BIII Jet Ranger (Figure 5). The survey lines were flown at a nominal line spacing of two hundred (200) meters and the tie lines were flown at 2 km spacing for the magnetometer. The average survey elevation was 39 meters vertically above ground. The experience of the pilots helped to ensure that the data quality objectives were met and that the safety of the flight crew was never compromised given the potential risks involved in airborne surveying.

Figure 5: Bell 206 Jet Ranger equipped with mag stinger for magnetic data acquisition.

The base of operations for this survey was in Schaft Creek, BC. The Precision crew consisted of a total of six members:

Shane Groves, Don Plattel, and Harmen Keyser – Pilots
Mike Jensen - Operator
Shawn Walker – Operator / On-site Geophysicist
Jenny Poon – Operator / On-site Geophysicist

The survey was started on May 05, 2011 and completed on June 02, 2011. The survey encountered several delays due to poor weather conditions and magnetic storms.

4.0 Equipment:

For this survey, a magnetometer, base station, laser altimeter, and a data acquisition system were required to carry out the survey and collect quality, high resolution data. The survey magnetometer is carried in an approved "stinger" configuration to enhance flight safety and improve data quality in this mountainous terrain.

4.1 AGIS:

The Airborne Geophysical Information System, AGIS, (Figure 6), is the main computer used in data recording, data synchronizing, displaying real-time QC data for the geophysical operator, and generation of navigation information for the pilot display system.

Figure 6: AGIS installed in the Bell 206.

The AGIS was manufactured by Pico Envirotec; therefore the system uses standardized Pico software and external sensors are connected to the system via RS-232 serial communication cables. The AGIS data format is easily converted into Geosoft or ASCII file formats by a supplied conversion program called PEIView. Additional Pico software allows for post real time magnetic compensation and survey quality control procedures.

4.3 Magnetometer:

The magnetometer used by Precision GeoSurveys is a Scintrex cesium vapor CS-3 magnetometer. The system was housed in a front mounted "stinger" (Figure 7). The CS-3 is a high sensitivity/low noise magnetometer with automatic hemisphere switching and a wide voltage range, the static noise rating for the unit is +/- 0.01 nT. On the AGIS screen the operator can view the raw magnetic response, the magnetic fourth difference, aircraft position, and the survey altitude for immediate QC of the magnetic data. The magnetic data are recorded at 10 Hz. A magnetic compensator is also used to remove noise created by the movement of the helicopter as it pitches, rolls and yaws within the Earth's geomagnetic field.

Figure 7: View of the mag stinger.

4.4 Base Station:

For monitoring and recording of the Earth's diurnal magnetic field variation, Precision GeoSurveys uses two base stations: Scintrex proton precession Envi Pro magnetometer and GEM GSM-19T magnetometer. Both base stations are mounted as close to the survey block as possible to give accurate magnetic field data. The Envi Pro base station (Figure 8), uses the well proven precession technology to sample at a rate of 0.5 Hz. A GPS is integrated with the system to record real GPS time that is used to correlate with the GPS time collected by the airborne CS-3 magnetometer.

Figure 8: Scintrex Envi Pro proton precession magnetometer.

The GEM GSM-19T magnetometer (Figure 9) also uses the proton precession technology sampling at a rate of 0.5 Hz. The GSM-19T has an accuracy of +/- 0.2 nT at 1 Hz.

Figure 9: GEM GSM-19T proton precession magnetometer.

4.5 Laser Altimeter:

The pilot is provided with terrain guidance and clearance with an Acuity AccuRange AR3000 laser altimeter (Figure 10). This is attached at the aft end of the magnetometer boom. The AR3000 sensor is a time-of-flight sensor that measures distance by a rapidly-modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 300 m off of natural surfaces with 90% reflectance and 3 km off special reflectors. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and analog outputs, the distance data are transmitted and collected by the AGIS at 10 Hz.

Figure 10: Acuity AccuRange AR3000 laser altimeter.

5.0 Data Processing:

After all the data are collected after a survey flight several procedures are undertaken to ensure that the data meet a high standard of quality. All data were processed using Pico Envirotec software and Geosoft Oasis Montaj geophysical processing software.

5.1 Magnetic Processing:

During aeromagnetic surveying noise is introduced to the magnetic data by the aircraft itself. Movement in the aircraft (roll, pitch and yaw) and the permanent magnetization of the aircraft parts (engine and other ferric objects) are large contributing factors to this noise. To remove this noise a process called magnetic compensation is implemented. The magnetic compensation process starts with a test flight at the beginning of the survey where the aircraft flies in the four orthogonal headings required for the survey (002^{o}/183^{o} and 090^{o}/267^{o} in the case of this survey) at an altitude where there is no ground effect in the magnetic data. In each heading, specified roll, pitch and yaw maneuvers are performed by the pilot; these maneuvers provide the data that are required to calculate the necessary parameters for compensating the magnetic data. A computer program called PEIComp is used to create a model for each survey to remove the noise induced by aircraft movement; this model is applied to each survey flight so the data can be further processed.

A magnetic base station is set up before every flight to ensure that diurnal activity is recorded during the survey flights. Base station readings were reviewed at regular intervals to ensure that no data were collected during periods with high diurnal activity (greater than 5 nT per minute). The base station was installed within the survey block at a magnetically noise-free area, away from metallic items such as steel objects, vehicles, or power lines. The magnetic variations recorded from the stationary base station are removed from the magnetic data recorded in flight to ensure that the anomalies seen are real and not due to solar activity.

Some filtering of the magnetic data is also required. A Non Linear filter was used for spike removal. The 1D Non-Linear Filter is ideal for removing very short wavelength, but high amplitude features from data. It is often thought of as a noise spike-rejection filter, but it can also be effective for removing short wavelength geological features, such as signals from surficial features. The 1D Non-Linear Filter is used to locate and remove data that are recognized as noise. The algorithm is ‘non- linear’ because it looks at each data point and decides if that datum is noise or a valid signal. If the point is noise, it is simply removed and replaced by an estimate based on surrounding data points. Parts of the data that are not considered noise are not modified. The combination of a Non-Linear filter for noise removal and a low pass trend enhancement filter resulted in level data as indicated in the results section of this report. The low pass filters simply smoothes out the magnetic profile to remove isolated noise.

Filtering is also applied to the laser altimeter data as to remove vegetation clutter and to show the actual ground clearance. To remove vegetation clutter a rolling statistic filter was applied to the laser altimeter data and a low pass filter was used to smooth out the laser altimeter profile to remove isolated noise. As a result, filtering the data will yield a more uniform surface in close conformance with the actual terrain.

A lag correction of 1.7 seconds was applied to the total magnetic field data to compensate for the lag in the recording system as the magnetometer sensor flies 6.45 m ahead of the GPS antenna.

5.3 Final Data Format

Abbreviations used in the GDB files are as follows:

X – Easting in WGS84, UTM zone 9N
Y – Northing in WGS84, UTM zone 9N
galt – GPS altimeter readings
lalt – laser altimeter readings
dtm – digital terrain model
GPStime – GPS time
basemag – diurnal data
mag – total magnetic field

The file format will be provided in two (2) formats, the first will be a .GDB file for use in Geosoft Oasis Montaj, the second format will be a .XYZ file, this is text file. A complete file provided in each format will contain only magnetic data.

Appendix A
Equipment Specifications

Scintrex Envi Pro Proton Magnetometer with Integrated GPS (Base Station)

Total Field Operating Range	23,000 to 100,000 nT (gamma)
Total Field Absolute Accuracy	±1 nT (gamma)
Sensitivity	0.1 nT (gamma) at 2 second sampling rate
Tuning/ Sampling	Fully solid state. Manual or automatic, keyboard selectable Cycling (Reading) Rates 0.5, 1, 2, or 3 seconds
Gradiometer Option	Includes a second sensor, 0.5m (20 inch) staff extender and processor module
Gradient Tolerance	> 7000 nT (gamma)/m
'Walking' Mode	Continuous reading, cycling as fast as 0.5 seconds
Supplied GPS Accuracy	+/- 1m (Autonomous), < 1m WAAS Connects to most external GPS receivers with NMEA & PPS output
Standard Memory	**Total Field Measurements**: 84,000 readings **Gradiometer Measurements**: 67,000 readings **Base Station Measurements**: 500,000 readings
Real-Time Clock	1 second resolution, ± 1 second stability over 24 hours or GPS time
Digital Data Output	RS-232C, USB Adapter
Power Supply	Rechargeable, 2.9 Ah, lead-acid dry cell battery 12 Volts External 12 Volt input for base station operations
Operating Temperature	40℃ to +60℃ (-40℉ to 140℉)
Dimensions and Weight	**Console**: 250mm x 152mm x 55mm (10" x 6" x 2.25") 2.45 kg (5.4 lbs) with rechargeable battery **Magnetic** 70mm d x 175mm (2.75"d x 7") **Sensor**: 1 kg (2.2 lbs) **Gradiometer** 70mm d x 675mm (2.75"d x 26.5") **Sensor**: (with staff extender) 1.15 kg (2.5 lbs) **Sensor Staff**: 25mm d x 2m (1"d x 76") 0.8 kg (1.75 lbs)

GEM GSM-19T Proton Precession Magnetometer (Base Station)

Configuration Options	15
Cycle Time	999 to 0.5 sec
Environmental	-40 to 60 ° Celsius
Gradient Tolerance	7,000 nT/m
Magnetic Readings	299,593
Operating Range	10, 000 to 120,000 nT
Power	12 V @ 0.62 A
Sensitivity	0.1 nT @ 1 sec
Weight (Console/ Sensor)	3.2 Kg
Integrated GPS	Yes

Scintrex CS-3 Survey Magnetometer

Operating Principal	Self-oscillation split-beam Cesium Vapor (non-radioactive Cs-133)
Operating Rage	15,000 to 105,000 nT
Gradient Tolerance	40,000 nT/metre
Operating Zones	10° to 85° and 95° to 170°
Hemisphere Switching	a) Automatic b) Electronic control actuated by the control voltage levels (TTL/CMOS) c) Manual
Sensitivity	0.0006 nT √Hz rms.
Noise Envelope	Typically 0.002 nT P-P, 0.1 to 1 Hz bandwidth
Heading Error	+/- 0.25 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy	<2.5 nT throughout range
Output	a) continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the power supply voltage b) square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth	Only limited by the magnetometer processor used
Sensor Head	Diameter: 63 mm (2.5") Length: 160 mm (6.3") Weight: 1.15 kg (2.6 lb)
Sensor Electronics	Diameter: 63 mm (2.5") Length: 350 mm (13.8") Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics	3m (9' 8"), lengths up to 5m (16' 4") available
Operating Temperature	-40°C to +50°C
Humidity	Up to 100%, splash proof
Supply Power	24 to 35 Volts DC
Supply Current	Approx. 1.5A at start up, decreasing to 0.5A at 20°C
Power Up Time	Less than 15 minutes at -30°C

Scintrex ENVI PRO Proton Base Station Magnetometer with Integrated GPS

Total Field Operating Range	23,000 to 100,000 nT (gamma)
Total Field Absolute Accuracy	±1 nT (gamma)
Sensitivity	0.1 nT (gamma) at 2 second sampling rate
Tuning/ Sampling	Fully solid state. Manual or automatic, keyboard selectable Cycling (Reading) Rates 0.5, 1, 2, or 3 seconds
Gradiometer Option	Includes a second sensor, 0.5m (20 inch) staff extender and processor module
Gradient Tolerance	> 7000 nT (gamma)/m
"Walkmag" mode Option	Continuous reading, cycling as fast as 0.5 seconds
Supplied GPS Accuracy	+/- 1m (Autonomous), < 1m WAAS Connects to most external GPS receivers with NMEA & PPS output
Standard Memory	**Total Field Measurements**: 84,000 readings **Gradiometer Measurements**: 67,000 readings **Base Station Measurements**: 500,000 readings
Real-Time Clock	1 second resolution, ± 1 second stability over 24 hours or GPS time
Digital Data Output	RS-232C, USB Adapter
Power Supply	Rechargeable, 2.9 Ah, lead-acid dry cell battery 12 Volts External 12 Volt input for base station operations
Operating Temperature	-40°C to +60°C (-40°F to 140°F)
Dimensions and Weight	**Console**: 250mm x 152mm x 55mm (10" x 6" x 2.25") 2.45 kg (5.4 lbs) with rechargeable battery **Magnetic** 70mm d x 175mm (2.75"d x 7") **Sensor**: 1 kg (2.2 lbs) **Gradiometer** 70mm d x 675mm (2.75"d x 26.5") **Sensor**: (with staff extender) 1.15 kg (2.5 lbs) **Sensor Staff**: 25mm d x 2m (1"d x 76") 0.8 kg (1.75 lbs)
Options	• Base Station Accessories Kit • Cold Weather Accessories • Additional Software Packages • Training Programs

Geometrics G-856AX Proton Base Station Magnetometer

Resolution	O.1 nT
Total Field Absolute Accuracy	0.5 nt
Clock	Julian time, accuracy 5 secs per month
Tuning	Auto or manual, range of 20,000 to 90,000 nt
Gradient Tolerance	1000 nT/metre
Cycle Time	3 secs to 999 secs standard, can be manually selected as fast as 1.5 secs cycle time
Memory	5700 field or 12500 base station readings
Display	Six digit display of field/time, three digit auxiliary display of line number, day
Digital Output	RS-232, 9600 baud
Input	Will accept external cycle command
Physical Console	7 x 10.5 x 3.5 inches, (18 x 27 x 9 cm) 6 lbs (2.7 kg)
Sensor	3.5 x 5 inches (9 x 13 cm) 4 lbs (1.8 kg)
Environmental	Meets specifications within 0 to 40 °C. Will operate satisfactorily from -20 to 50 °C
Power	Rechargeable, magnetically compensated Gel-Cel batteries

RMS Herz TOTEM-2A Multi-channel VLF Electromagnetic System

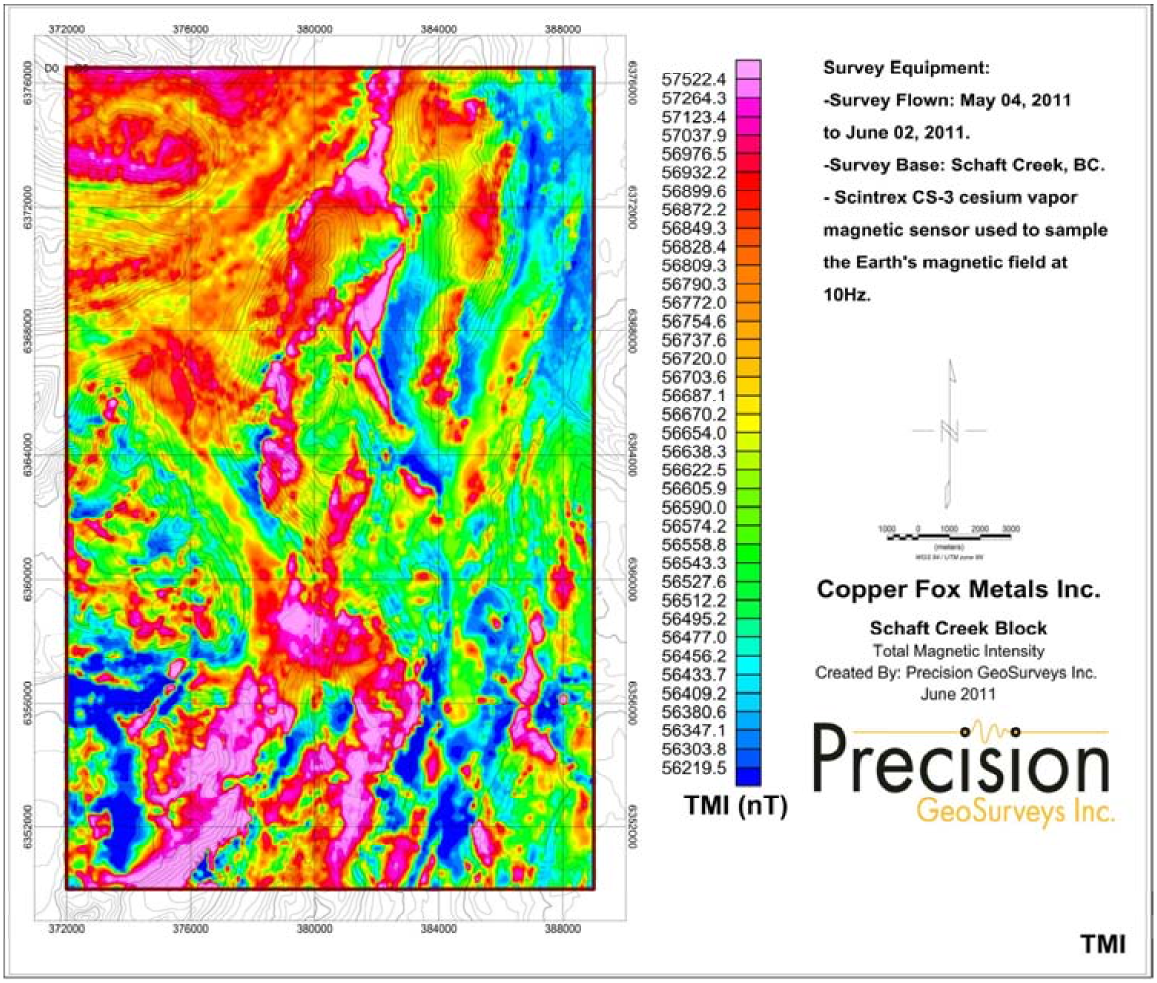
Primary Source	Magnetic field component radiated from remote or local VLF radio transmitters (one or two simultaneously)
Parameters Measured	Total field, vertical quadrature, horizontal quadrature and gradient
Frequency Range	15 kHz to 25 kHz; front panel selectable for each channel in 100 Hz steps
Sensitivity Range	130 mV m to 100 mV m at 20 kHz, 3 db down at 14 kHz and 24 kHz
VLF Signal Bandpass	-3 dB at +80 Hz; < 4% variation at +50 Hz
Adjacent Channel Rejection	300 to 800 Hz = 20 to 32 dB; 800 to 1500 Hz = 32 to 40 dB; > 1500 Hz > 40 dB (for < 2% noise envelope)
Out of Band Rejection	10 kHz to 2.5 kHz = 5 x 10-4 Am to 5 x 10 -1 Am < 2.5 kHz rising at 12 db octave; 30 kHz to 60 kHz = 5 x 10-4 Am to 8 x 10-3 Am > 60 kHz rising at 6 dB octave (for no overload condition)
Output Filter	Time constant 1 sec. for 0% to 50% or 10% to 90%, noise bandwidth 0.3 Hz (second order LP)
Internal Noise	1.3 mV m rms (ambient noise will exceed this)
Electric Field Rejection	< 0.5% error for 20 m tow cable
Sferics Filter	Reduces noise contribution of impulse filter
Controls	Power switch, frequency selector switches (Line and Ortho), meter switch (total quad), and sferics filter switch
Displays	Meters (Line and Ortho), sferics light, overload light

Pico Envirotec AGIS-L data recorder system
(for Navigation, Gamma spectrometer, VLF-EM and Magnetometer Data Acquisition)

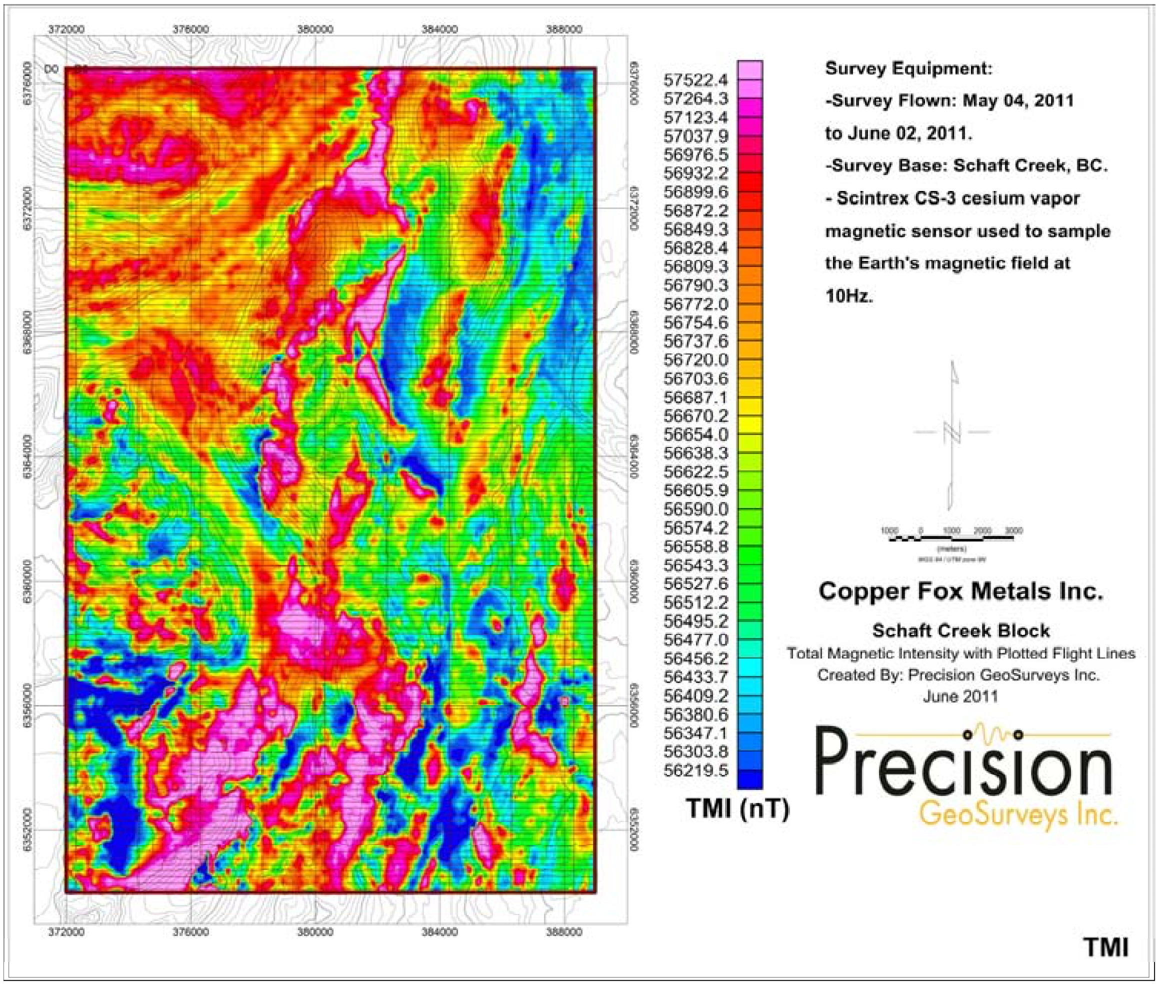
Functions	Airborne Geophysical Information System (AGIS) with integrated Global Positioning System Receiver (GPS) and all necessary navigation guidance software. Inputs for geophysical sensors - portable gamma ray spectrometer GRS-10, MMS4 Magnetometer, Totem 2A EM, A/D converter, temperature probe, humidity probe, barometric pressure probe, and laser altimeter. Output for the 2 line Pilot Indicator
Display	Touch screen with display of 800 x 600 pixels; customized keypad and operator keyboard. Multi-screen options for real-time viewing of all data inputs, fiducial points, flight line tracking, and GPS channels by operator.
GPS Navigation	Garmin 12-channel, WAAS-enabled
Data Sampling	Sensor dependent
Data Synchronization	Synchronized to GPS position
Data File	PEI Binary data format
Storage	80 GB
Supplied Software	**PEIView:** Allows fast data Quality Control (QC) **Data Format:** Geosoft GBN and ASCII output **PEIConv**: For survey preparation and survey plot after data acquisition
Software	**Calibration:** High voltage adjustment, linearity correction coefficients calculation, and communication test support **Real Time Data Collection:** Automatic Gain real time control on natural isotopes and PC based test and calibration software suite
Power Requirements	24 to 32 VDC
Temperature	Operating:-10 to +55 deg C; storage:-20 to +70 deg C

Appendix B

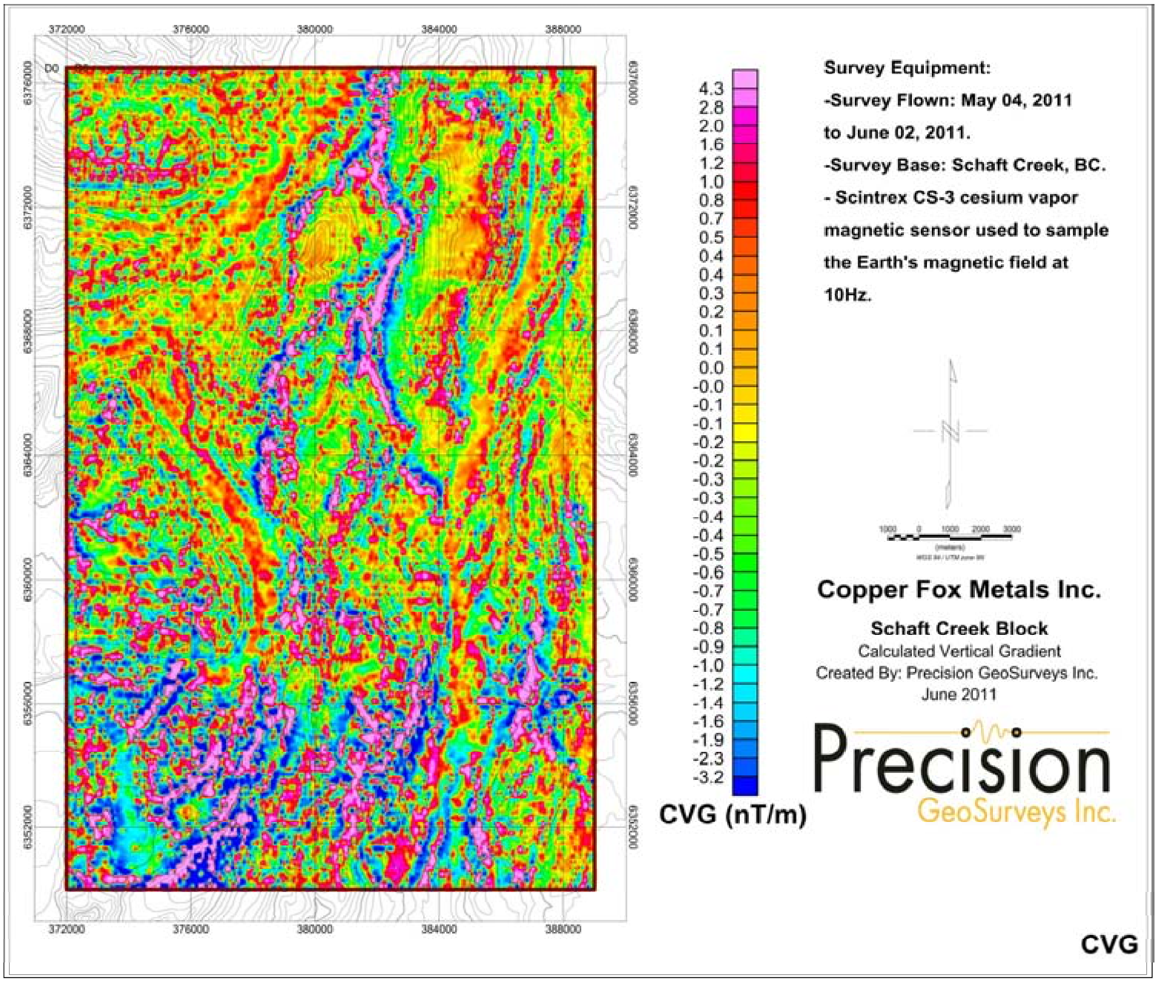
Maps



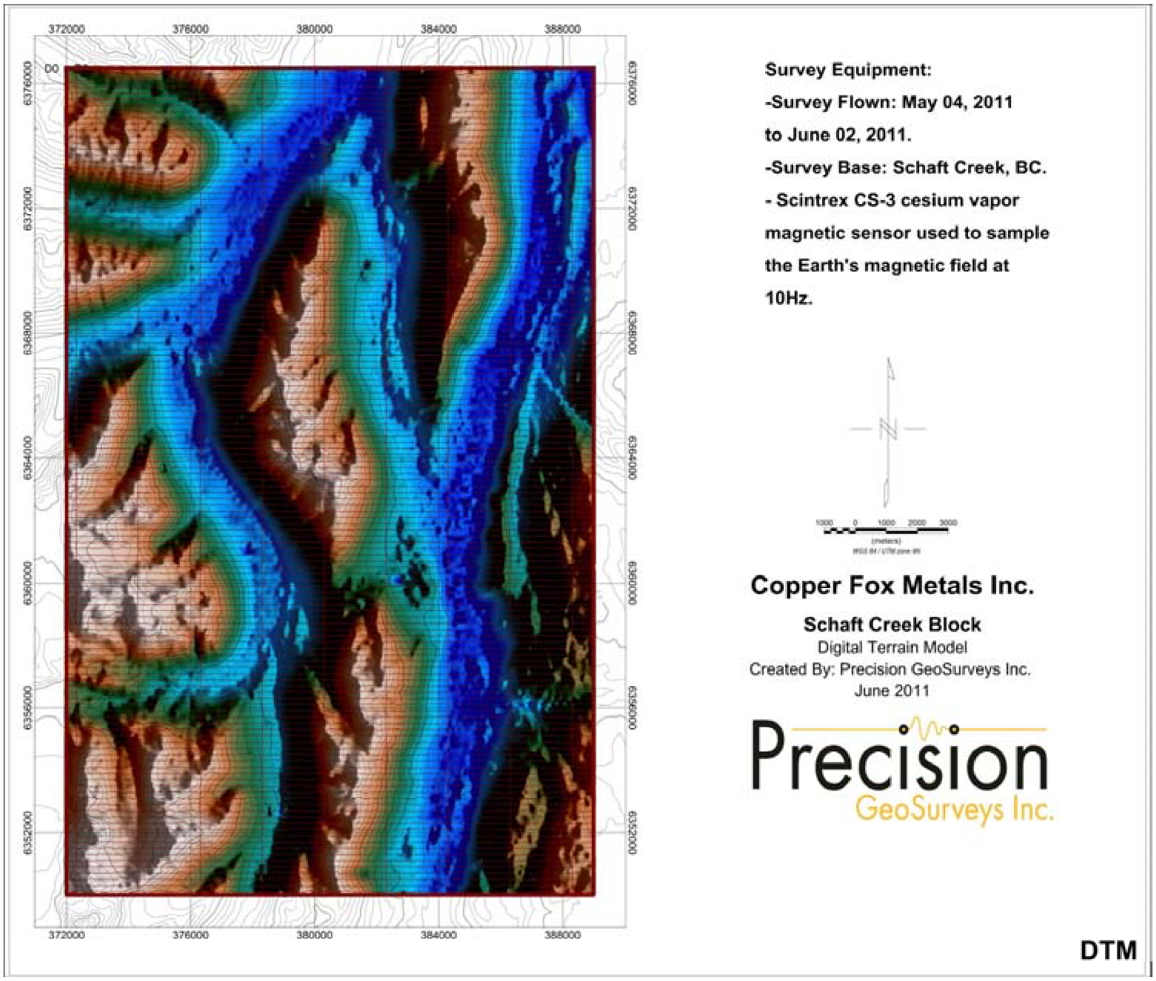
Map 1: Schaft Creek Property total magnetic intensity.



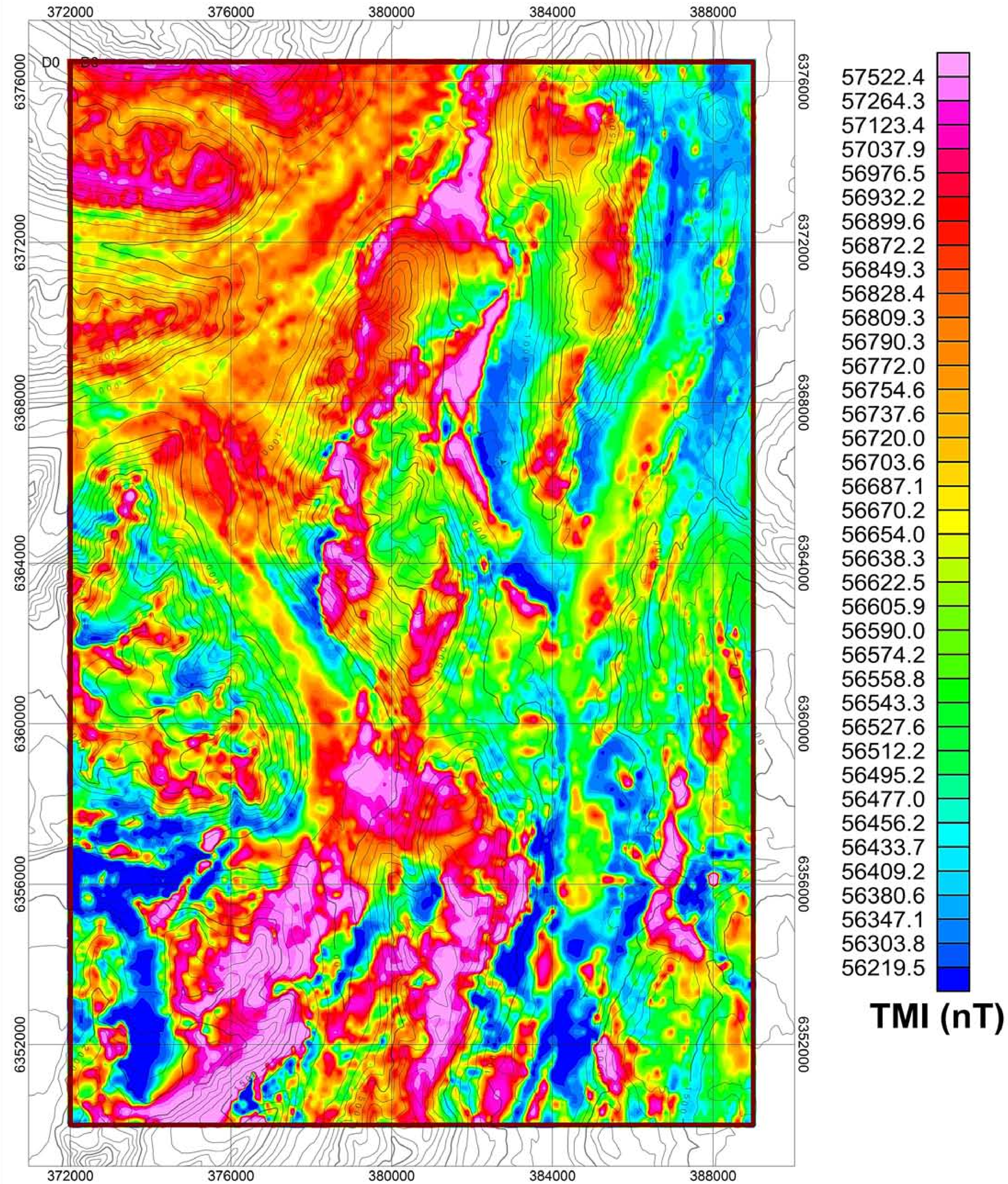
Map 2: Schaft Creek Property total magnetic intensity with plotted flight lines.



Map 3: Schaft Creek Property calculated vertical gradient.



Map 4: Schaft Creek Property digital terrain model.



Survey Equipment:

-Survey Flown: May 04, 2011 to June 02, 2011.

-Survey Base: Schaft Creek, BC.

- Scintrex CS-3 cesium vapor magnetic sensor used to sample the Earth's magnetic field at 10Hz.

1000 0 1000 2000 3000
(meters)
WGS 84 / UTM zone 9N

Copper Fox Metals Inc.

Schaft Creek Block

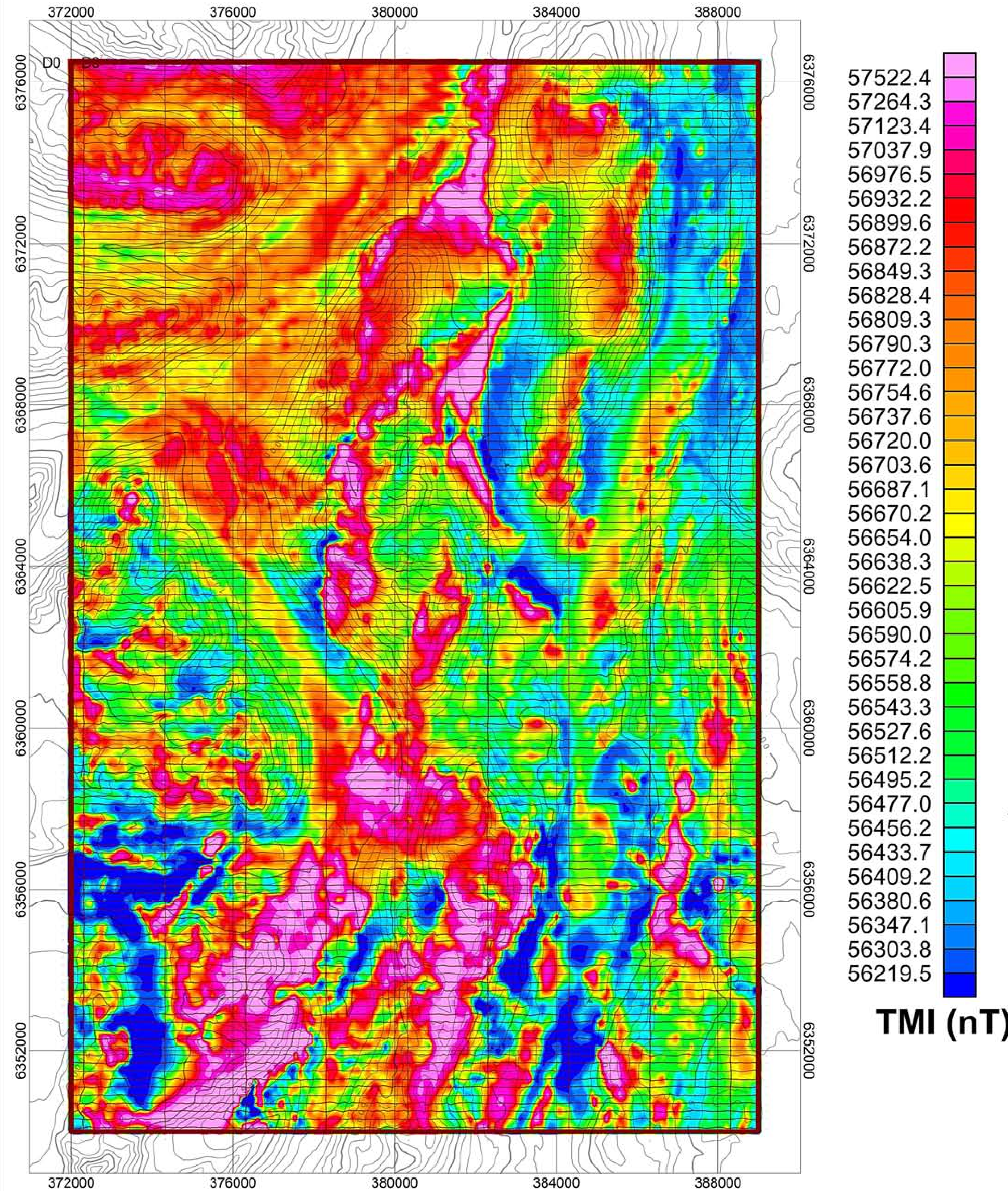
Total Magnetic Intensity

Created By: Precision GeoSurveys Inc.

June 2011

Precision GeoSurveys Inc.

TMI



Survey Equipment:

-Survey Flown: May 04, 2011 to June 02, 2011.

-Survey Base: Schaft Creek, BC.

- Scintrex CS-3 cesium vapor magnetic sensor used to sample the Earth's magnetic field at 10Hz.

Copper Fox Metals Inc.

Schaft Creek Block

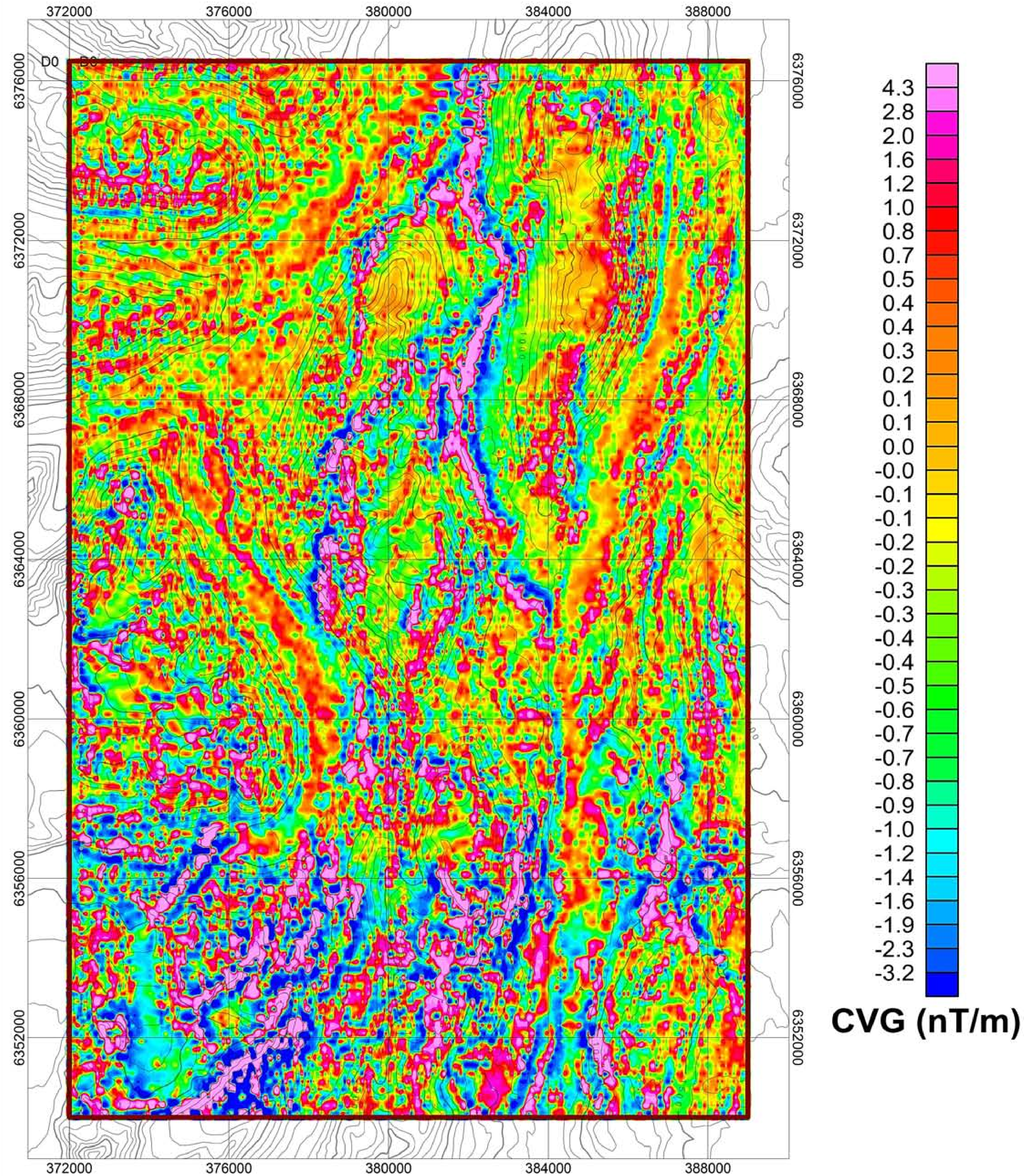
Total Magnetic Intensity with Plotted Flight Lines

Created By: Precision GeoSurveys Inc.

June 2011

Precision GeoSurveys Inc.

TMI

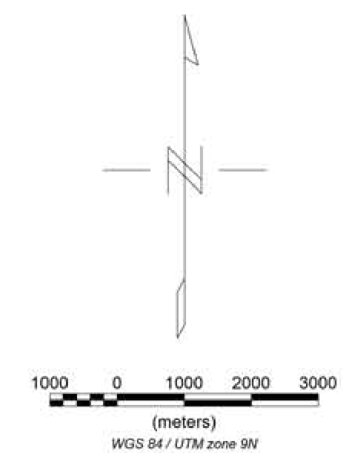


Survey Equipment:

-Survey Flown: May 04, 2011 to June 02, 2011.

-Survey Base: Schaft Creek, BC.

- Scintrex CS-3 cesium vapor magnetic sensor used to sample the Earth's magnetic field at 10Hz.



Copper Fox Metals Inc.

Schaft Creek Block

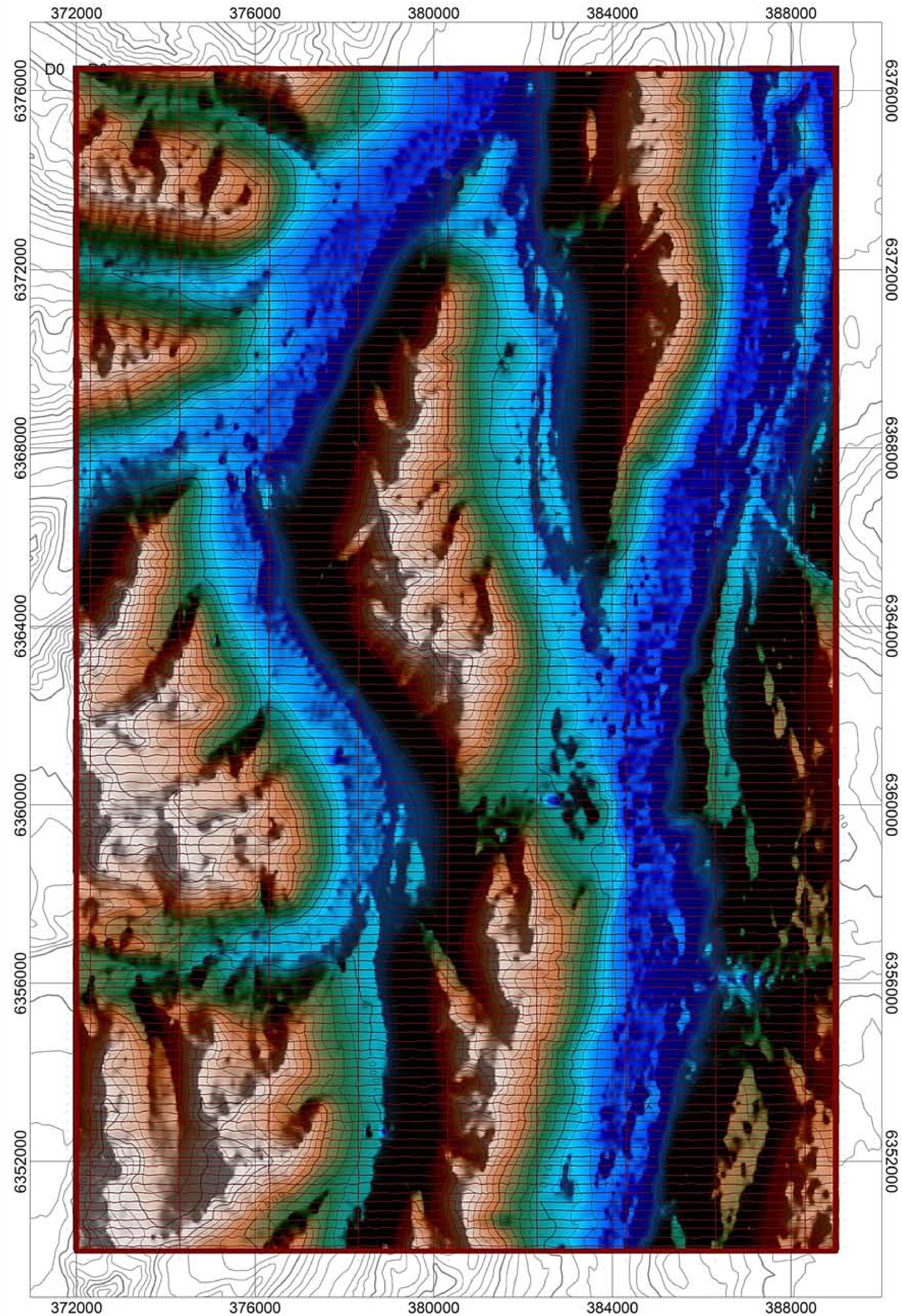
Calculated Vertical Gradient

Created By: Precision GeoSurveys Inc.

June 2011

Precision GeoSurveys Inc.

CVG

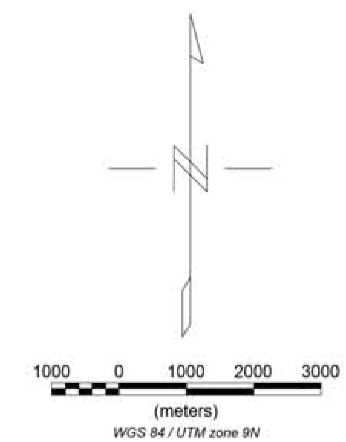


Survey Equipment:

-Survey Flown: May 04, 2011 to June 02, 2011.

-Survey Base: Schaft Creek, BC.

- Scintrex CS-3 cesium vapor magnetic sensor used to sample the Earth's magnetic field at 10Hz.



Copper Fox Metals Inc.

Schaft Creek Block

Digital Terrain Model

Created By: Precision GeoSurveys Inc.

June 2011

Precision GeoSurveys Inc.

DTM